Lectures
ON
CRANIAL SURGERY.

Delivered to the Class of Operative Surgery in the University of Edinburgh,

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LECTURE II.

GENTLEMEN,—In my former lecture I drew your attention to the general characters of the skull as a protective mechanism, and to its behaviour under such forms of violence as involve its fracture. We shall now consider in outline the pathological conditions present when that has occurred, the symptoms to which these conditions give rise, and the indications for treatment that such symptoms afford.

3. THE PATHOLOGY OF FRACTURES OF THE SKULL.

Fractures of the cranial bones are *per se* not more dangerous accidents than fractures of other plate-like bones, such as the scapula or ilium. It is merely their position as component parts of the skull, and their close relation to its contents, that give such intense significance to these bones in relation to traumatic interference. Here, as in all fractures, the displacements that occur, the loss of normal function dependent on the integrity of the bone, and the accompanying lesions in neighbouring structures, are the main subjects of our solicitude; and it is therefore our chief object to remedy displacements, to supplement functions for the time being in abeyance, and to counteract the morbid tendencies of complications that may be present. What has been already said as to the peculiar constitution of the skull as a closed rigid system, where sudden increase of tension is fraught with much danger, emphasises the serious nature of displacements caused by violence, and supplies us, as practical surgeons, with the only important distinction on which a classification of these fractures can be based. We must therefore divide them into two classes—(1) fractures with displacement; (2) fractures without displacement. I think I need scarcely apologise for discarding the time-honoured anatomical classification that differentiates fractures of the base from those of the vault, nor yet the pathological arrangement, once so vitally important, that separates simple from compound fractures. Both may be kept provisionally, as referring to matters of great collateral, but not of primary, importance: for the former expresses merely a difference of locality and of structural liability to fracture, but bears no relation to the essential nature of the injury; while the latter has ceased to be an objective reality, since the introduction of the antiseptic system and its triumphs in practice have removed the clinical distinction on which it was based. Regarding the fracture from a purely surgical point of view, it is primarily this question of the presence or absence of displacement that chiefly concerns us; and in regard to this point we must first make up our mind, before adverting even to such important secondary questions as the presence of concussion, laceration and hæmorrhage, or other serious concomitant lesions that may complicate such cases.

1. Fractures with displacement are uniformly due to concentrated blows, and are closely localised to the area of their application, whether produced in the vault, as by a sword-cut, or in the base by the impact of the condyle of the jaw, or of the upper end of the spinal column impelled upwards from below. With the exception of a few anomalous cases, represented by an all but unique specimen in the University Anatomical Museum, in which a large fragment is dislocated outwards, the displacement that occurs is always in an inward direction; so that the displaced fragments invade the cavity of the skull, and, by diminishing its space, increase the intra-cranial tension generally, and press directly on the surface of the brain at the seat of the injury. In the majority of cases these fragments consist of the whole thickness of the skull, as in the well-known stellate and pond-like fractures; but in the punctate variety the inner table is chiefly involved, since it alone is shivered by an acuminated blow, and becomes the active agent in the compression of the brain that ensues. Primary compression of the brain due to displaced fragments makes itself evident by immediate symptoms. These are of a general or localised character according to the absolute amount and to the situation of the injury inflicted. They only differ from symptoms of secondary compression, due to such complications as intra-cranial hæmorrhage and suppuration, in the earlier period of their appearance. Hence I shall discuss these symptoms together, apart from the special consideration of the varied conditions that produce them. It is evident, then, that fractures with displacement are of importance primarily from the depression of fragments that characterises them, and secondarily from complications that may be associated with them.

2. Fractures without displacement occur only as the result of diffuse blows. They are fissured fractures, involving the whole thickness of the skull; and in many cases they are chiefly developed at a distance from the area of application of the force producing them. They are never a cause of primary compression of the brain; and their importance depends solely upon the complications to which they give rise. These, in turn, are due to peculiarities in the anatomy of the regions involved. On the one hand, fissured fractures are apt to cause laceration of bloodvessels in contact with the bone, giving rise to intra-cranial hæmorrhage; on the other, they may establish channels of direct communication between the interior of the skull and other natural cavities, as the pharynx, the nasal cavity, and the middle ear, thus entailing the great probability of a septic invasion of the meninges. They have further a greater tendency to spread widely in the brittle textures of the base than elsewhere; and in this region their occurrence is the more serious on account of the close relation of important nervous structures to the bone; as, for instance, where the medulla oblongata rests upon the basilar process. Here a fissured fracture involving the laceration of contiguous soft tissues will affect directly

FIG. 3.

Lamina of septic blood-clot firmly adherent to the dura mater, lying between it and the orbital plate of the frontal bone, in connexion with a fissure of the anterior fossa of the base, that communicated with the nasal cavity. Death from septic meningitis thirty-one days after the accident.

parts of supreme vital importance, and may well explain those cases where instantaneous death accompanies an apparently slight injury to the base.

The pathology of the chief complications of fracture must now occupy our attention. The most prominent of these is direct injury to the brain, causing its concussion or laceration, and thus giving rise to a series of symptoms in no way due to the fracture, which it is of great practical importance to differentiate from those resulting directly or indirectly from that injury. When considerable shocks are received by the brain tissue, its function as a whole may be checked and disorganised from the physical *commotio cerebri* that ensues; or there may be severe bruising or laceration from the violence of its impact against the wall of the cranial cavity opposite to that which first received the blow. In either case, whether the brain injury be molecular in character, or associated with gross destructive lesions, symptoms of concussion are produced. We shall consider these immediately, contrasting them with those of compression, which are not mere concomitants, but results of the fracture, and which demand from us entirely different treatment from that appropriate to cases of concussion.

The next most important complication of fracture is intra-cranial hæmorrhage from rupture of bloodvessels. The most marked cases occur from laceration of the dura mater; and the effusion of blood is found to take place most typically between this membrane and the bone. If it occur in the region of the vault, it will almost certainly give rise to compression of the brain, which comes on more or less rapidly in direct proportion to the greater or less severity of the laceration. In the region of the base it is more usual to find a fissure opening into some contiguous natural cavity, in which direction the blood makes its escape, thus avoiding compression of the brain, but opening the way for yet more serious infective lesions, since its character as a highly fermentative substance, when once shed, renders it a direct channel for the ingress of microbes to regions where their activity is peculiarly deleterious.

Thirdly, we must consider the pathology of septic processes set up within the skull. They are possible complications of every compound fracture, and they would be of much more frequent occurrence were it not that the absolute necessity of strict antiseptic treatment in this region is now so widely understood. It is especially in fractures of the base, which are almost without exception compound fractures, that the contingency of an infective process is to be dreaded. I have already mentioned how the septic ferments reach the cranial cavity, by migration from surfaces on which they are normally present, when these have been placed in direct communication with the interior by open fissures, through which putrescible fluids are constantly welling in an outward direction. When the ferments have once gained admittance through these channels, they find abundant pabulum for their further growth and development in the blood clots at the seat of fracture, and in the serous fluids naturally present within the skull. An illustrative case is figured in the accompanying drawing (Fig. 3), in which septic blood clot was found adhering firmly to the dura mater, and communicating directly with the nasal cavity through a fissure of the base. The clot corresponded to a patch of pachymeningitis, and this affected part of the dura was found to be the infective focus whence a disseminated leptomeningitis had proceeded. Septic inflammatory processes within the skull proceed on the same broad lines as similar processes in other regions. They may be local or general in the area of their distribution; and they may be acute, subacute, or chronic in their progress. The generally distributed and chronic types usually lead to death by exhaustion, without evident symptoms of compression. The local and acute types give rise to local suppuration, and produce symptoms of secondary compression of the brain, to which I shall presently refer.

Lastly, there are certain pathological conditions which are less complications than delayed consequences of fracture, such as the production of cicatrices and the development of cystic or osteophytic growths at the seat of fracture. These conditions manifest their presence in many cases by symptoms pointing to local compression or irritation of the parts of the brain interfered with by their presence; and as they must be diagnosed and treated on the same principles as the complications already described, I shall include them here in the same treatment as the more recent and more obvious results of fractures of the skull.

ABSTRACT OF

Lectures

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons.

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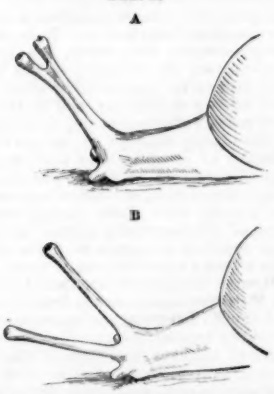
LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—In this lecture it is my intention to discuss briefly the application of Huxley's third law—viz., *certain parts which were originally distinct have coalesced*—to the explanation of some pathological phenomena. The consideration of this law will lead us into some very interesting speculations, for it is of no less importance than the two previously discussed. The law of coalescence has a most extensive application, and embraces a large number of interesting phenomena. At the outset it will be of importance to illustrate clearly those cases which are true examples of the process and those which simulate it.

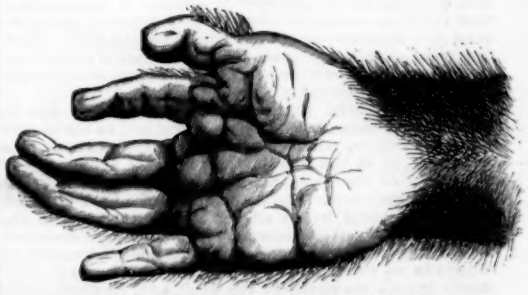
FIG. 1.



A, Fused oculiferous tentacles of a snail. B, The tentacles of a normal snail for comparison. (From a drawing furnished me by Theo. D. A. Cockerell.)

The oculiferous tentacles of the snail represented in Fig. 1 have fused throughout their length, instead of remaining quite separate. Normally, the snail's eyestalks develop as distinct outgrowths; their coalescence in the

FIG. 2.



The hand of a monkey. The third and fourth fingers are united to the tips by a web. (Museum of the Royal College of Surgeons.) False coalescence.

case under consideration is truly pathological. On the other hand, take the case of the webbed fingers of the monkey shown in Fig. 2. At first sight this would seem to

be analogous to the snail's tentacles; but embryology teaches us that the digits appear as buds on the extremity of the developing hand, when it first becomes differentiated from the Wolffian ridge, and at the earliest stages the digits are united with each other nearly to the tips. Later they grow at a greater rate than the web, until they assume the relation shown in the adult hand. Should the web grow *pari passu* with the digits, then we obtain the malformation known as webbed fingers. The condition is nearly always symmetrical. In this case the union of the fingers is not an instance of true coalescence, but an exaggeration of an embryonic condition. As examples of true coalescence in the domain of pure pathological anatomy, the union of contiguous air-cells of the lungs in the condition known as senile emphysema and large-lunged emphysema may be cited. A more obvious case would be that of two ovaries, each cystic, in the same patient. As they enlarge, the cysts meet each other across the median line and become inseparably fused. Such specimens are not very uncommon. Nævi occasionally furnish illustrations of the law of coalescence. The ordinary nævus, or teleangiectiasis, is a cluster of tiny arterioles, and as such may remain throughout a long life and undergo no change. In rare instances the arterioles may grow, enlarge in calibre very considerably, and the mutual pressure they exert upon each other may produce absorption of the arterial walls, until an erectile tumour of large size results, which may jeopardise the life of the patient by uncontrollable hæmorrhage.

In order to deal with this law satisfactorily it will be necessary to consider it in three divisions. 1. *Abnormal coalescence.* In this division we may conveniently place all those curious cases of fusion of parts normally distinct. 2. *Retarded coalescence.* This would include all cases of non-union, or imperfect union of parts which should coalesce in the ordinary course. 3. *Excessive coalescence.* In many parts of the body during development, union of two structures originally distinct is necessary; should it overstep the normal limit, then it may be denominated excessive. Under one or other of these three divisions we shall find it convenient to arrange the various specimens and conditions to be discussed in connexion with the law of coalescence.

1. *Abnormal coalescence.*—The snail's tentacles already mentioned fall under this heading. In the human subject horseshoe kidney may be taken as a type of the condition. More serious are those malformations in which the lower limbs are fused into a single mass—a deformity known as *syren fœtus;* or two fœtuses, at first separate, may subsequently coalesce and become so intimately blended that two heads and duplicate limbs are the only indications of their original individuality. Examples of abnormal coalescence may be studied in the neighbourhood of the knee joint. The bursæ in connexion with the tendons round about this joint not unfrequently enlarge and communicate with the synovial cavity. Indeed, the complex nature of this remarkable synovial chamber is largely due to the coalescence of neighbouring bursæ during its evolution. Instructive examples of coalescence may be studied in connexion with ovarian cysts and in hydronephrosis. It is a widespread opinion that the so-called unilocular ovarian cyst is the result of dilatation of one Graafian follicle. This may be so; but that it holds good in all cases of uniocular ovarian cysts I cannot believe. In the cysts of this class which I have been able to examine the walls contained crowds of smaller ones; and I am of opinion that in the early stages the ovary was the seat of general cystic enlargement, and several cysts coalesced to form one large cavity, which became the predominant feature of the tumour. This process may be actually studied in hydronephrotic cysts. In the early stages the kidney becomes sacculated; if the case progresses, the septa between individual sacculi disappear, and one common cavity is the result.

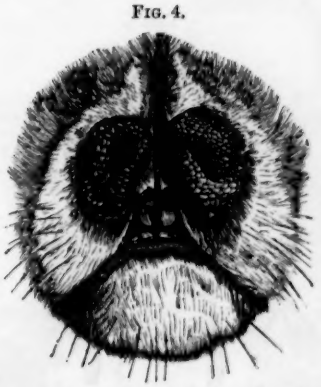
2. *Retarded coalescence.*—Examples of this class are numerous and important, including such conditions as hare-lip, cleft palate, and the like. Among the rarer defects may be mentioned *macrostoma*, due to retarded coalescence of the mandibular fissure. An excellent specimen, for which I am indebted to the courtesy of Dr. Rayner and my friend, Mr. J. Palmer, is given in Fig. 3. The case differs in one respect from several recorded examples of this defect, in that there was no malformation of the pinna or supernumerary auricles. Sir William Fergusson, lecturing in this theatre in 1867 on hare-lip and split palate, stated that he had never seen a case of median hare-lip, and did not believe that such a condition existed. Through the kindness of my friend, Mr. Frederick Treves, I have been able to dissect and place before you an undoubted case of median hare-lip in the human subject. The dissection shows, what was suspected during life, that the premaxillary bones as well as the ethmo-vomerine plate were absent.[1] The case is very interesting, not only on account of its rarity, but from its bearing upon the recent views of His concerning the mode of formation of the lips in the embryo. Before discussing these views I intend to describe a remarkable form of median hare-lip occurring in dogs.

FIG. 3.

Macrostoma in a child six weeks old.

In the summer of 1886, whilst staying in Paris with my friend, Mr. Freeman of Bath, we noticed some pug-dogs kept as pets. These dogs had a remarkable split involving the median line of the nose, lip, and pre-maxillary bones, as in Fig. 4. We were successful in obtaining a bitch, and Mr. Freeman had her crossed with a Skye terrier. As a result, she threw litters of young, some with cleft noses like the bitch, some normal-nosed like the father. The dog's nose in the drawing is the result of one of the successful crossings. A dissection of the head of these pugs with split lips and nose reveals further defects connected with the septum. The condition is well displayed in Fig. 5, which represents a sagittal section carried through the head, a little to one side of the median line. The septum is seen to be imperfect below, and instead of the vomer coming into contact with the floor of the nasal fossa, its lower border ends in a free edge more than a quarter of an inch above it. Thus the two nasal fossæ are in direct communication with each other below the vomer for its entire length. The extent to which the fissure invades the palate is indicated by the asterisk in the drawing. In order to furnish a complete account of the anatomy of this deformity, the skull has been prepared from a third specimen, and a drawing of the anterior

FIG. 4.



A dog's nose with median cleft in the nose, lip, and palate.

[1] For fuller details see Odont. Soc. Trans., Dec. 1887.

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portion of the palate is given in Fig. 6 in order to show the extent to which the bones are involved.

The explanation of the rarity of median hare-lip in man, and its comparative frequency in other mammals, for it is normal in many rodents, is the following:—As the median process develops to form the nose, two rounded prominences make their appearance at each angle. These are the globular processes of Professor His (Fig. 7); they give rise to the alæ of the nose and the pre-maxillæ; later they are

FIG. 5.

Longitudinal section of a pug's head, to show the defective septum.

joined by the lateral pieces to complete the lip. Prof. His also points out that in some mammals, especially rodents, the globular processes do not fuse, but remain permanently separate, whereas in man they always fuse, but are not so constantly joined by the lateral pieces. These observations are valuable, inasmuch as they afford a ready explanation of the occurrence of median fissure in the hare, but its extreme rarity in man. When it occurs in man it is due to suppression of the septum and globular processes. In the pugs we may

FIG. 6.

Anterior part of the hard palate, to show the extent of the cleft.

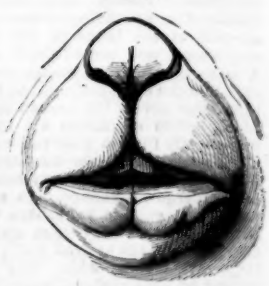
fairly infer these processes habitually fail to coalesce in the median line. The case of the pugs is of interest as an instance of a transmitted defect becoming a permanent character.

These views regarding the globular processes and their relation to median hare-lip receive large support from the marsupials. Whilst my attention was concentrated on these fissures, a young kangaroo, which could only have been in the pouch about three weeks, came under my notice, and on examining the mouth it is easy to recognise the median fissure in the upper lip, extending to and involving the pre-maxillæ, and opening on the hard palate exactly as in the pugs. There is, in addition, a shallow median fissure involving the lower lip. Fearing this might be an abnormal condition, I hastened to examine various marsupial embryos in my stores and any others to which I had access. These fissures are constant in the early embryos of Macropus,

FIG. 7.

A ventral view of the face of a fœtus, showing the globular processes. (After His.)

FIG. 8.



The mouth and nose of a young marsupial embryo, to show the late persistence of the median fissure in the upper and lower lip.

Halmaturus, Petrogale, and Phalangista. In these Metatherian forms the fissures persist longer than in the Eutheria. It is of some interest to find the late persistence of the median fissure in the lower lip, associated with the movable symphysis found in marsupials generally.

The Teratomata furnish some excellent examples of the effects of imperfect coalescence, differing somewhat from those we have been considering. The term "Teratomata" is applied to a class of congenital tumours composed of formed tissues derived from the epiblast and mesoblast, or from epi-, meso-, and hypoblast. They form three groups, distinct not only in structural characters, but also in their etiology. 1. Dermoid cysts arising from sequestrated portions of the epiblast. 2. Dermoids arising in obsolete canals. 3. Parasitic fœtuses. In connexion with the subject of this lecture, the first group—*sequestration* cysts—will chiefly occupy our attention. The most typical form of such a cyst occurs at the outer angle of the orbit, less frequently at its inner angle and root of the nose. Its clinical appearance must be very familiar to all. On opening such a cyst its interior will be found lined with skin. Sprouting from the walls of the cyst we find hairs furnished with sebaceous glands, sometimes of very large size. The superficial layers of cells in these cysts differ from those of the skin, in being softer and less horny. The cavity of the cyst usually contains epithelial débris mingled with sebum and cholesterin. Dermoid cysts of this character, arising in detached or sequestrated portions of the epiblast, occur very frequently in the median line of the trunk. They are much more common on the ventral than on the dorsal aspect, and, as far as I know, a dermoid cyst has never been seen on the limbs. For convenience of description these sequestration cysts may be considered in three groups—(1) dorsal, (2) ventral, and (3) cranial. Embryology teaches us that the trunk is formed from two lateral portions which fuse together dorsally and ventrally, the line of coalescence, commencing at the occiput and extending the whole length of the spinal column, passes through the scrotum and extends by way of the abdomen and thorax, involves the throat, symphysis menti, tongue, and palate, finally stopping at the nose. Coalescence may fail at any spot along this extensive line, sometimes to such an extent as to allow the viscera to protrude; at other times it leaves a small congenital hole capable of admitting only the thinnest probe, as in congenital median cervical fistulæ. Not infrequently the union is apparently complete, but in the line of fusion a small cyst arises lined with skin, due to the imperfect obliteration of the epithelial covered surfaces; that is, coalescence has failed at one small spot—it may, perhaps, in the embryo be less in size than a pin's point. Let us consider some specimens of dermoids occurring in the lines of fusion.

1. *Dorsal.*—Dermoids along the dorsal line are very rare, but cysts lined with skin, furnished with hair, and communicating with the central canal of the cord, are on record.

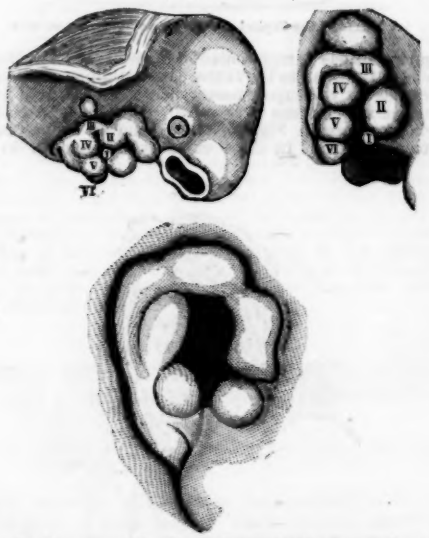
2. *Ventral.*—Dermoids in connexion with the scrotum are not uncommon, and there exist good reasons for the belief that many described as testicular dermoids really originated in the scrotum. In that the penis is formed of two lateral

FIG. 9.

A dermoid cyst of the orbital cleft, and one growing in the pinna. (After Lannelongue.)

portions, similar cysts would be expected in the skin of this organ, and a few such have been recorded. The line extending from the perineum to the neck is rarely the seat of these cysts, but dermoids occur with tolerable frequency in the neighbourhood of the manubrium sterni (angulus Ludovici). They are also encountered in the median line between the hyoid bone and the chin. The median line of

FIG. 10.



Three drawings representing the development of the human pinna. (Modified from His.)

the palate is of especial interest, because two forms of tumours arise in it—little sessile and pedunculated tumours formed of collections of epithelium, known as epithelial pearls, and genuine dermoids.

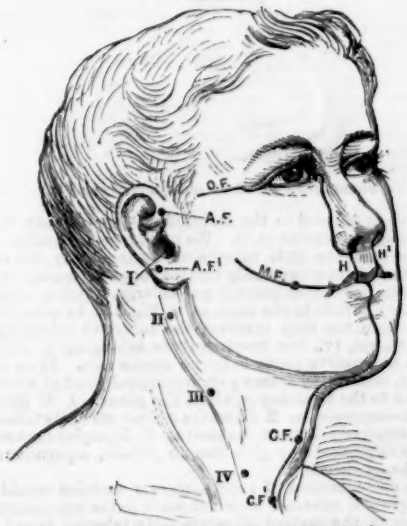
3. *Cranial.*—Dermoids occur with tolerable frequency in connexion with the cranium, and in different positions—at each angle of the orbit, the root of the nose, in the pinna, and in almost any situation on the skull. The last set will not be considered, but full consideration will be given to those in relation with the orbit and pinna. A glance at the drawing of the head of the human embryo (Fig. 7) shows that a fissure extends from the middle of the upper lip along the side of the nose, involving the orbit and extending behind it some little distance. This satisfactorily accounts for dermoids at the inner angle of the orbit, and in the case shown in Fig. 9 the smaller of the two tumours indicates the most posterior limit of this cleft.

The cyst occupying the pinna arises somewhat differently, and in order to appreciate its etiology it will be necessary to consider the main features connected with the development of the pinna. Thanks to the careful observations of His, we know that the pinna arises from the fusion of six small tubercles, as represented in the accompanying diagrams (Figs. 10 and 11), which arise from the swollen edges of the first visceral cleft. These tubercles appear very early as a series of sharply defined elevations. In embryos, at the end of the first month six of these may be distinguished. Two belong to the mandibular and three to the hyoid arch, the remaining one to the uniting band. In the figures these elevations are indicated by figures I. to VI. They may for convenience be referred to as follows:—I. is the tuberculum tragicum; II., the tuberculum anterius; III., tuberculum intermedium; IV., tuberculum antihelicis; V., tuberculum antitragicum; VI., the lobulus. The subsequent fate of these tubercles may be briefly given. The tuberculum tragicum unites, across the cleft, with the tuberculum antitragicum, the space formerly separating them being simply indicated by the fissure intertragicum. The tuberculum intermedium is the source of the helix. Whilst the tuberculum antihelicis furnishes the antihelix, the nodule vi., cut off by the fusion of the tragus and antitragus, becomes the lobule. It not infrequently happens that some of these tubercles fail to coalesce completely, and a sinus lined with epidermis results. This is most common

FIG. 11.

A malformed pinna with supernumerary auricles.

FIG. 12.



AF, AF', Situations of congenital auricular fistulæ. I., II., III., IV., indicate the external orifices of *branchial* fistulæ. I. is the external auditory meatus; OF, the orbital fissure; MF, the mandibular fissure; HH', the lines of lateral hare-lip; CF, CF mark the situations of congenital *cervical* fistulæ.

in the helix, whilst a fistula is on very rare occasions seen in the lobule. If a space exists between any two tubercles without an external orifice, its subsequent growth and dilatation will bring it into the category of sequestration cysts, as in Fig. 9. Not rarely the tubercles become pedunculated, and give rise to one form of supernumerary auricles (Fig. 11). In Fig. 12 the various situations of

the defects which arise as a result of incomplete or faulty coalescence are indicated in a diagrammatic manner, in so far as relates to branchial fistulæ, oral fissures, and congenital fistulæ in the pinna. The external orifice of a branchial fistula is liable to vary a little in position.

It may perhaps be necessary to draw attention to one or two points in connexion with these fissures. In the first place, it is not justifiable to apply the adjective "branchial" to those fissures lying anterior to the hyomandibular fissure; we have no knowledge of any living form in which these fissures lodge branchiæ. Although there are many reasons to lead us to suppose that at one time they may have supported gills, nevertheless the arguments are not altogether convincing. In the case of the hyomandibular fissure we know positively that it is a modified branchial cleft. In adult elasmobranchs it is represented by the spiracle or blow-hole, and in the embryo most beautiful gill-tufts sprout from it. Again, Jean Cusset, in his interesting monograph on dermoid cysts in connexion with branchial clefts, represents the orbital and mandibular fissures meeting at the external auditory meatus. This is inconsistent with the plain anatomical facts of the case. It must not be forgotten that in the early embryo each branchial cleft is surmounted by the swollen edge of the corresponding branchial bar, and in this respect these fissures resemble the gill-slits of a shark, each surmounted by its operculum; indeed, the pinna may be regarded as an enormously developed operculum, modified for acoustic purposes; and it is a curious fact that in aquatic mammals, such as whales seals, sea-lions, &c., the pinna becomes

FIG. 13.

The neck of a girl with a supernumerary auricle.

abortive or reduced to the insignificant proportions which originally distinguished it. We must also remember that in some cases the little tuberculum surmounting the other branchial clefts occasionally imitate those belonging to the tympano-Eustachian passage and enlarge, forming a supernumerary auricle in the neck, as in Fig. 13. In other cases, suppression not only involves the tubercles belonging to clefts II., III., IV., but involves those belonging to cleft I., and a diminutive pinna is by no means rare. Thus, three defects, interesting from an embryological point of view, as well as to the teratologist, affect the pinna. 1. It may be absent—*suppression*. 2. *Excessive coalescence* of its tubercles may completely obstruct the meatus. 3. *Imperfect coalescence* of the tubercles may give rise to *fistulæ*, *supernumerary auricles*, or *dermoids*.

The consideration of supernumerary auricles would be incomplete if reference were not made to the representation of them in the statues of satyrs. My talented friend Mr. S. G. Shattock drew my attention to this matter, and to him belongs the credit of associating certain curious structures to be seen in the necks of these statues with the cutaneous and cartilaginous auricles we have been studying. Mr. Shattock further assisted me by placing at my disposal photographs illustrating the subject in an interesting way. Thus, in the representation of a faun from the Capitol (Fig. 14) we see in the neck two distinct appendages attached in the line of the anterior margin of the sterno-mastoid muscle, midway between the angle of the jaw and the sternum. By the side of the faun we see a goat; pendulous from the animal's neck are two structures similar to those in the faun's neck. Mr. Shattock truly remarks that these appendages are not represented in the necks of all the modern fauns. My interest was thoroughly aroused in this question, and I examined the numerous satyrs in the British Museum. I find that in the ægipans (satyrs with goat-like

FIG. 14.

A faun from the Capitol, showing supernumerary auricles.

legs) an auricle is represented in the neck, but it differs in shape to that seen in the fauns. In the ægipans it resembles very closely the supernumerary auricle seen in Fig. 13, whereas in the fauns it is usually pendulous. A common form is shown in Fig. 15, taken from an ægipan in the British Museum. In these cases it corresponds to the

FIG. 15.

Head of an ægipan, to show the supernumerary auricle. (Brit. Mus.)

anterior border of the sterno-mastoid. Most of the fauns in the British Museum lack these auricles.

These cervical auricles in the satyrs differ in shape and vary in position exactly as they do in individuals unfortunate enough to possess them. Through the kindness of Mr. Slinger, of University College, I am able to exhibit a cast of a satyr's head showing one of these excrescences.

Heusinger,[2] in his well-known paper on Congenital Cervical Fistulæ, mentions the frequency with which pendulous tags of skin are to be found in the necks of pigs, sheep, and goats, and he clearly recognised their relationship to supernumerary auricles occurring in man. Although Heusinger's observations were made in 1876, and the paper has been frequently referred to by writers interested in these questions, no one, so far as I know, has adduced evidence in support of Heusinger's statements. I have busied myself in this matter, and find that cervical auricles are extremely frequent in goats. They vary considerably in length and in shape. In some cases they may exceed the length of two inches; in the majority of cases they are symmetrical. A typical specimen is represented in Fig. 16, taken from a goat living

FIG. 16.

Head and neck of a goat, showing the cervical auricles.

in the Zoological Society's Gardens. This animal is the result of a cross between a Nubian and the common goat.

The likeness of the appendages in the faun from the Capitol and those of the goat by its side, as well as the skin tags in my goat below, are very suggestive. Mr. Shattock is also careful to point out that the sculptors still further combine the characters of man and goat in these fauns, for the hairy tuft in the loins is a good imitation of the goat's tail, and in several cases—e.g., in the faun from the Capitol—a goat-skin hangs over the shoulder. I feel quite sure that in many instances it is clearly the goat which furnished the notion of the *pendulous* auricles in the fauns; on the other hand, the type of supernumerary auricles seen in the ægipans agrees with that found in man. Be this as it may, one thing is very certain: those old sculptors were close observers of nature.[3]

REMARKS ON THE

RAPID RESTORATION OF THE FOOT TO THE NORMAL POSITION AFTER TENOTOMY.

BY HOWARD MARSH,

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MUCH difference of opinion at present exists as to the best way of treating talipes. Many surgeons prefer to change the position of the foot gradually after tenotomy, so that the new material connecting the ends of the divided tendon is slowly stretched; while others adopt the plan of bringing the foot quickly into the desired posture—a method involving the formation of a wide gap between the cut ends of the tendon, which is left to be filled up by the development of a new piece. The question which of the two is the better proceeding can be determined only by the test of practical experience. I venture to offer a few remarks on the subject, because, although the latter method, since renewed attention was directed to it by Dr. Reginald Sayre,[1] has been followed by a large number of English surgeons, it has at present not been generally discussed, and many doubt its safety. Mr. Parker, however, has written an instructive and interesting chapter respecting it in his work on the "Nature and Treatment of Talipes."

For many years I employed the method of gradual extension by the use of a Scarpa's shoe, and both at St. Bartholomew's Hospital, while I was in charge of the Orthopædic Department, and at the Hospital for Sick Children, a large number of cases passed under my observation. I met with the usual experience. There was, in the first place, the difficulty that in a large number of cases the parents were too poor to bear the cost of the Scarpa's shoe. In the second place, cases could only be treated satisfactorily in the hospital. It was often found impossible, when the children were out-patients, to keep the shoe so adjusted that gradual and uninterrupted extension of the tendon could be secured. The parents could not attend every day, and either the tendon consolidated before it was sufficiently elongated, or the skin became sore and the treatment had to be interrupted. In short, the results obtained were so unsatisfactory that I refrained from undertaking the treatment till the cases could be received into the wards. Even when cases were admitted, considerable difficulties remained to be overcome. An expensive instrument was still required, and the management of the Scarpa's shoe demanded frequent supervision and rearrangement. Without this there is liability that the foot will move under the straps, and so the action of the Scarpa's shoe is suspended for several hours in the twenty-four. I believe this is the experience of every surgeon. It is what is at least extremely likely to happen in the general run of cases. What may be done by a surgeon who has the case entirely in his own hands, or who employs a specially trained nurse who is constantly with the child, is no doubt a different matter. It may be freely allowed that under these circumstances, which, however, entail a very large expense, many cases may usually be brought to a quite satisfactory result.

For the last few years I have adopted the method of changing the position of the foot more quickly. About a third of the deformity has been at once corrected, and the foot has been enclosed in plaster-of-Paris; at the end of a week another third of the deformity has been removed and the foot put up again; and at the end of another week the foot has been placed in the completely normal posture, enclosed in plaster, and left for three weeks. I feel perfectly justified in speaking of this method as highly satisfactory. It is far less troublesome both to the patient and the surgeon, and the result is very favourable. As to the subsequent condition of the tendon. The tendo Achillis may be taken as an example, because it can be fully examined. It has been clear beyond a doubt that a new piece of tendon, quite as large on cross section as the original tendon, has been quickly formed, in no instance have pressure sores occurred under the plaster case, and I have not met with any relapse, though the cases have been kept as far as possible under observation. Indeed, I am inclined strongly to believe that the tendency to relapse is much less marked than it is in cases in which the new material is gradually stretched. I ought to say that I have not followed the plan, except in slight cases, of at once placing the foot in the normal position. I have been content with removing the deformity in two or three stages. I have found this practice efficacious, and it has seemed better, in a tentative proceeding, to err, if at all, on the side of safety. I desire to pass no criticism whatever on the "immediate method." I have no experience that justifies me in pronouncing upon it, either favourably or the reverse.

Although the details of the method I have employed are those which are commonly used in this form of treatment, it will be best to specify exactly how they have been carried out. After tenotomy the puncture in the skin is closed by a flake of cotton wool and collodion, and two or three turns of a narrow flannel bandage are applied over it, but not at all firmly. The whole foot, with the lower third of the leg is next enclosed in a thick and even layer of cotton wool, and the whole covered in by a lightly applied flannel bandage

[2] Deutsche Zeitschrift für Thiermedicin, Bd. ii., 1876.

[3] For further accounts of satyrs, see THE LANCET, Jan. 14th, 1888, especially as regards the hairy tuft in the loins.

[1] Alabama Medical and Surgical Journal, July, 1886.

put on in two layers. Thus the various prominences of the foot are well protected. Then a plaster-of-Paris bandage, wetted through and then squeezed free of superfluous water, is put on in two, three, or more layers, according to the strength required. During the application and setting of the plaster bandage the foot is steadily held in the desired position. The plaster, when the time comes for changing, is very easily removed by placing the foot in warm water and then unrolling the bandage. At the end of three weeks in simple cases, and when the foot comes readily into the normal position, the usual boot and outside iron, such as is used when the early treatment has been conducted by means of a Scarpa's shoe, may be applied, and the patient may be allowed to begin walking at the end of another three weeks or a month—i.e., six or seven weeks after the tenotomy. As illustrations of this form of treatment two cases that I think are instructive may be briefly mentioned.

CASE 1.—A. R——, aged fifteen, had spastic contraction of the lower limbs, combined with muscular wasting, the result of old disease of the spinal cord. The tendo Achillis was small. I divided the tendon for the removal of talipes equinus, and brought the foot into the normal position in three readjustments, a week apart from each other. At each dressing I could easily feel that the tendon was being reformed, and at the end of the time it was as large at the point of division as it was above and below it. As the boy had always walked with great difficulty, he was kept off his feet for two months. He wore an ordinary boot, and no orthopædic appliance was used. There was no tendency to recontraction of the tendon, but the foot was gently moved every morning and evening well within a right angle with the leg.

The above case appeared a good test as to the safety of this method, for the calf muscles were atrophied and the nutrition of the whole limb was very much impaired. The evidence it afforded was entirely favourable.

CASE 2.—R. C——, aged sixteen, had rectangular talipes, contraction of the plantar fascia, and painful corns over the heads of the metatarsal bones. The plantar fascia and the two Achillis tendons were divided, and the feet were brought well within a right angle with the legs, and enclosed in plaster. When examined at the end of three weeks the Achillis tendons were being repaired, and no gap at the point of division could be felt. The plaster bandage was reapplied, and not removed again for three weeks. At the end of this period the tendons where they had been cut were of the normal size, so that the point of division was not apparent to the touch. The patient could flex and extend his feet freely. The plaster was now discontinued, and he was left without instrumental support. He was directed not to put his feet to the ground for a few days, but to have them moved up within a right angle once a day, so that it could be ascertained that no recontraction of the tendons was taking place. A week later—that is, seven weeks after the tenotomy—the boy began to walk a little each day with the aid of a stick. The tendons seemed normal, and he soon moved about freely without assistance. There has been no recontractions.

The true reason why so many relapses occur after tenotomy for talipes in cases in which the foot is in a normal position at the time the patient is discharged, is that the instrumental support that is relied on to maintain the normal posture is not efficient. It acts as a mere *vis inertiæ:* for however ingenious may be the contrivances—whether consisting of elastic extension or a spring—that are employed to exercise active force, they are commonly to a considerable extent nugatory, either because they soon yield and become slack, or because the foot slides in the boot, and so evades their influence. Another difficulty is that the foot is, of course, not a rigid lever, but a flexible structure, admitting of some movement at every one of its numerous joints, and it is beyond the power of any boot in which the patient can walk to deal successfully with such a complicated series of motions. Especially is this the case in the short and plump foot of a child. Under these circumstances the foot slowly relapses into its former habitual position, and, as is often seen, masters the boot and forces it out of shape. In manipulative movement of the foot practised regularly by someone who has been properly instructed, we possess a means by which relapses can be prevented. Surgeons who are in the habit of frequently treating cases of club-foot are fully aware of the efficiency of this method; but I think that in many quarters it is very much less valued than it deserves to be. I have seen it produce results that could not, I believe, have been secured in any other way; and I am convinced that when talipes is treated by the plan of quickly bringing the foot into the normal posture, followed by a properly adjusted degree of manipulation, a very much larger proportion of success will be met with than is at present reached. Manipulation offers the advantage that it can be taught to anyone of common intelligence in the course of two or three lessons. All that is necessary is that the leg should be held—when the knee is straight—just above the ankle in one hand, while with the other hand the foot, held so as to be thoroughly under command, is carried towards the normal position, neither roughly, however, nor with a sudden jerk, but yet firmly and quickly enough to exercise an extending or stretching influence on any structure, whether ligamentous or tendinous, upon which the contraction may depend. The movement should be repeated eight or nine times regularly, and in careful adaptation to the direction in which the deformity has to be overcome; and the exercise should be used once, twice, or three times a day, according to the obstinacy of the case. In long-standing instances manipulation must be continued over at least many months.

Some four or five years ago a child, six years old, was brought to the Hospital for Sick Children with double talipes equino-varus, for which the tibial tendons and the tendo Achillis had been cut, but which had relapsed. The father was too poor to procure the necessary Scarpa's shoes, and I had not at that time employed the direct method. Under the circumstances, the best that could be done was to give the boy's father a pair of Scarpa's shoes that another child had worn, and to direct him to apply them as well as he could (they fitted the boy very indifferently), and to show him how to manipulate the feet. I saw no more of the case for a twelvemonth. At the end of that time he was brought again. The father, who was a cabinet-maker, and a strong-headed Positivist, had carried out the treatment without intermission. The feet were almost entirely free from deformity, the soles came flat to the ground, the heels were well down, and the child could walk and run with scarcely any noticeable defect. Similar cases could be related to show that manipulation is, next to tenotomy, the most efficient means we possess for the treatment of talipes. This method commends itself both from a physiological and a mechanical point of view. Physiologically, because in contrast with the passive resistance of an orthopædic boot and iron, it, when combined, as it always should be, with hot bathing and shampooing, leads to the exercise and development of the muscles and to improved nutrition of the limb. This is clearly seen when two limbs are compared, one of which has been regularly manipulated and the other confined in the heavy boot and iron often employed in the after-treatment of talipes, and the effect of which resembles that of the plaster-of-Paris jacket in lateral curvature of the spine. The mechanical advantage of manipulation over the mere passive resistance of even the most perfect orthopædic boot is obvious, for both the exact direction and the exact degree of force that are required can be secured, so that the movements employed can be precisely adjusted to the kind of deformity that has to be corrected. I do not wish to be understood as speaking against the use of well-made supports; they are generally desirable, and for the most part quite essential. I only urge that they should be combined with the full use of manipulative movement.

THE GEOGRAPHICAL DISTRIBUTION OF CANCEROUS DISEASE IN THE BRITISH ISLES.

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MANY circumstances during the last few years have combined to create amongst members of the medical profession an increased interest in the habits and haunts of cancerous diseases; and of late this interest has spread beyond medical circles to all classes of the public throughout the world, who are daily asking questions respecting this dreaded class of diseases, all of which are difficult and

many impossible to answer in the present state of our knowledge.

Amongst the difficult questions of to-day on this subject is the one that was put to me nearly twenty years ago by the Medical Society of London, after I had read a paper and explained my maps on the Geographical Distribution of Heart Disease and Phthisis: "Has cancer a geographical Distribution?" In other words, are there localities within the British Isles where the physical and geological features and local climates are capable of exercising on those who reside in or have resided in them any special influences on their bodies that could either promote, arrest, or retard the development of cancer? In fact, are there places within the British Isles where persons would be least likely to be attacked by cancerous diseases? And, on the other hand, are there places which those who may have reason to dread cancer should be earnestly advised to avoid?

On Nov. 30th, 1868, I endeavoured to answer this question by reading a paper before the Medical Society of London on the Geographical Distribution of Cancer in England and Wales, illustrated by a large coloured map, Dr. B. W. Richardson, F.R.S., President, being in the chair. In attempting to solve this difficult problem I had recourse to the same means that had been previously used in my investigations relative to the distribution of heart disease—Dr. W. Farr's Decennial Supplement (1851-1860) to the English Registrar-General's Twenty-fifth Annual Report—the features of which it will be necessary for me now to free from error, but that any deviation from these rules, especially as regards the separation of the sexes, would inevitably lead to confusion and misleading results, especially among those causes of death which affect males and females in different degrees.

Previous investigations.—The geographical distribution of heart disease, dropsy, and phthisis in females in England and Wales during the ten years 1851–60 had hitherto occupied my attention, and the investigation had served to familiarise me with the physical geography of those countries, their valley systems, their heights, aspects, geology, and the various factors of their local climates. The heart disease inquiry had taught a remarkable lesson on the effect of free natural ventilation by the prevailing winds in purging the valleys and the heights exposed to them of the stagnant and rheumy air that prevails in those pent-up localities *over* which, and not *through* which, these winds blow, and which are characterised by the highest mortality from heart disease, and a marked prevalence of rheumatism, the basis of our national heart disease. Again, whilst following the distribution of phthisis in England and Wales, I still had forcibly brought to my attention the necessity of studying physical geography in relation — (1) to *aspect*, for indiscriminately throughout the country I found that wherever the consumptive were exposed to the full force of the winds, there was to be found the highest mortality in England and Wales without exception; and (2) in relation to the protective influence of a precipitous cliff coast line

ENGLAND AND WALES.

Table of Deaths from Cancer among Males and Females separately at all ages and at different age periods, together with the Mean Populations at such age-periods and at all ages. (1851–1860.)

	Males.				Females.			
	Age-periods.	Mean population.	Deaths from cancer.	Death-rates.	Age-periods.	Mean population.	Deaths from cancer.	Death-rates.
Five-year periods	Under 5 years	1,265,830	268	0·21	Under 5 years	1,258,614	291	0·2
	Between 5 and 10	1,111,594	107	0·09	Between 5 and 10	1,106,619	102	0·09
	10 „ 15	1,011,942	83	0·08	10 „ 15	997,324	89	0·09
	15 „ 20	915,583	148	0·16	15 „ 20	929,333	169	0·1
	20 „ 25	827,833	224	0·27	20 „ 25	920,217	279	0·3
Ten-year periods	25 „ 35	1,356,605	849	0·62	25 „ 35	1,494,668	2,101	1·4
	35 „ 45	1,074,115	1,874	1·74	35 „ 45	1,133,809	6,712	5·9
	45 „ 55	792,246	3,344	4·22	45 „ 55	830,351	10,614	12·7
	55 „ 65	523,334	4,872	9·30	55 „ 65	565,586	10,478	18·5
	65 „ 75	285,108	4,288	15·03	65 „ 75	332,631	7,821	23·5
	75 „ 85	101,371	1,758	17·39	75 „ 85	128,750	3,030	23·5
	85 and above	13,121	244	18·59	85 and above	20,274	458	22·5
	Totals (all ages)	9,278,742	18,059	1·95	...	9,718,174	42,137	4·34

describe. For registration purposes England and Wales are divided into 630 districts, and these are subdivided into 2080 sub-districts; at present the former are only available for medico-geographical purposes in the case of cancer and and some other important causes of death, although for zymotic diseases the smaller unit may be used, but not satisfactorily. Whatever unit is used, however, Dr. Farr was of opinion that our death returns would be rendered useless unless the following rules were rigidly carried out, as he had done in his supplements, which are models for all medical statisticians, at least to follow, if they cannot improve. 1. That the sexes should be tabulated separately, whether the deaths referred to the whole country, its divisions, counties, districts, sub-districts, or parishes. 2. That the number of deaths among males and females occurring at all ages and at the different age-periods should be inserted in separate columns. 3. That at the top of each age-period column the number of males and females living at each of such periods should be inserted for calculating the relative mortality from each cause for each sex at the different age-periods, according to the population living at such age-periods in the several divisions, counties, districts, sub-districts, and parishes; for Dr. Farr held that the relative mortality from any of the several causes, calculated for each locality according to the number of deaths occurring in it amongst the mean estimated population of males and females living at each of the age-periods, during the time to which the calculation may refer, was practically on those living immediately in the lee, for within this line I had found the least mortality from phthisis.

During my own journeyings in England and Wales in pursuit of my studies I availed myself of the beautifully drawn and finely engraved "Physical and Geological Map of England and Wales," by G. B. Greenough, Esq., F.R.S., President of the Geological Society of London at its establishment, and at subsequent periods President of the Royal Geographical Society of London, &c. The first edition of this splendid map was published on November 1st, 1819, and the second (by the Geological Society) on November 1st, 1839; my copy of the latter was the ninety-third impression from the copperplate, and belonged in succession to Buckland and Faraday. The sharpness of the engraved lines of this map show well the details of the physical relief of the country and the smallest watercourses; so that before the coloured geological maps of the Ordnance Survey were published it was the best map for medico-geographical studies extant, and even since then the early copies, or those taken before the plate was worn out, will be highly prized by students of physical geography.

On a map of similar scale (six miles to the inch) I traced the boundaries of the 625 registration districts into which England and Wales are divided; so that within the boundary lines of each district could at a glance be studied, on reference to Greenough's map, its physical and geological features, aspects, watercourses, &c. All these 625 districts were

then coloured so as to indicate different degrees of annual mortality to every 10,000 living during the ten years 1851-1860. Thus, the districts having an annual death-rate *above* the average of the whole country were coloured *blue* of three different shades, the *darkest blue* indicating the *highest* mortality; whilst the districts having an annual death-rate *below* the average were distinguished by shades of *red*, the *darkest red* characterising those districts in which the *lowest* mortality occurred. *Blue* is the symbol of *disease*, or the colour of used-up, effete *venous* blood; whilst *red* is that of *health*, or the colour of life-giving oxygenated *arterial* blood. These shades of *red* and *blue* were then arranged on a scale, each shade representing a definite range of annual mortality to every 10,000 males and females living during the decennial period under discussion. Thus:—

Cancer:			Males.	Females.	Ann. to every 10,000 living.
Above the average	Darkest blue	... ...	5—6	6—7	
	Lighter „	... ...	4—5	5—6	
	Lightest „	... ...	3—4	4—5	
Below the average	Lightest red	... ...	2—3	3—4	
	Lighter „	... ...	1—2	2—3	
	Darkest „	... ...	0—1	1—2	

The material which formed the basis of my first investigation consisted of 18,059 deaths from cancer among a mean population of 9,278,742 males, and of 42,137 deaths from cancer among a mean population of 9,718,174 females. In the table in the preceding page these deaths have been arranged in age-periods for England and Wales, and for each registration district. The table shows that as life advances the relative number of deaths increases. This is not the case with phthisis, although it is so with heart disease. Cancer, as Dr. Farr observes, is fatal to few children, and the deaths are probably from soft cancer (fungus hæmatodes). At the age of from thirty-five to forty-five this terrible disease, developing with years, now makes an impression in the catalogue of women's diseases. Dr. Farr further remarks that the diseases of the urinary organs are more fatal to men, those of the generative organs to women. At the age of from forty-five to fifty-five the mortality is 4·2 for men and 12·7 for women. Again, at the age of ripeness, from seventy-five to eighty-five, cancer is more and phthisis less fatal to women in the proportion of 2·3 to 0·7.

In Dr. Farr's Supplement to the Registrar-General's Twenty-fifth Annual Report (1851-1860) each of the 625 registration districts had its deaths from cancer and twenty-two other causes arranged in two tables, one for males and the other for females, on different pages, arranged according to life-periods in exact accordance with the above model. In his second Supplement, that to the Registrar-General's Thirty-fifth Annual Report, a similar plan was adopted, the males and females being still kept separate. Materials had been collected in his office for the completion of a third Supplement upon exactly the same plan as the two preceding, when he resigned, and they fell into hands that, evidently from the use made of them, were not able to appreciate their value or the cause of their collection. Confusion succeeded to order, the result being that a worthless Supplement for 1871-1880 was issued by the present Registrar-General, in which the deaths from the twenty-six different causes among males and females were all huddled together under the *mask* of "persons," including "childbirth" to "diseases of the urinary organs," "cancer," "suicide," "puerperal fever," &c., in all which the death-rates among males and females widely differ, and in some, as "puerperal fever" and "childbirth," a male death-rate is impossible, as even Macaulay's "school-boy" would know. As an illustration of the effect of this blunder I will take the death-rates from this cause (childbirth) in the English border registration district, Berwick-upon-Tweed. In this district Dr. Farr, in his two Supplements for 1851-60 and 1861-70 gives the deaths among the mean female population separately, as in all other districts, and from these we find the annual death-rates from this important cause to be for these two decennial periods as follows: 1851-60—Berwick 2·54 deaths to every 10,000 females living, England and Wales 3·20; 1861-70—Berwick 2·10, England and Wales 3·21; whilst the present Registrar-General's numbers give us for 1871-80 a death-rate in Berwick of 0·85 to every 10,000 "persons" living, that of England and Wales during the same decennium being 3·25 to every 10,000 females; and, as he gives neither the number of deaths from this cause among females nor the mean population of this sex in the Berwick district, it is impossible to extract the truth as regards the deaths from childbirth among the mothers, who are thus incontinently mingled with their dead fathers, grandfathers, husbands, sons, and every other male neighbour who has died within the same period—and all this, we are told, is "to meet the practical requirements of the medical department of the Local Government Board."

Again, in the case of cancer Dr. Farr showed that the mortality among females from this cause during 1851-1860 was more than double that among males, the annual death-rates being to every 10,000 of each sex living as follows: 1851-60—males 1·95, females 4·34; 1861-70—males 2·44, females 5·23; and in 1871-1880—males 3·15, females 6·22; so that during the last thirty years this great difference was practically maintained, for during the first decade it was more than double by 0·22, in the second by 0·17, and in the third it was only 0·04 less than double that of the mortality amongst males. This, I maintain, is a remarkable fact in the natural history of a disease about which we are all of us anxious to know something more than we do. Women have three organs, which men have not, peculiarly liable in the British Isles to cancer—the uterus and the two mammæ; and the deaths arising from cancer of these organs help to swell the death-rate amongst them and to that doubling of their mortality just referred to.

Berwick will afford another illustration of the results of the vicious system adopted in the defective report mentioned. This district, with its oft-flooded areas, has a mortality from cancer, coloured blue in my map of England, *above* the average. This occurred in 1851-1860, when its cancer death-rate among females amounted to 5·00; in 1861-1870 Dr. Farr's figures enable us to ascertain that it had risen to 6·03; but when we come to the present Registrar-General's Supplement for 1871-1880, we are at once thwarted in the pursuit of our investigations; for he gives us no facts whatever connected with this sex, but foists upon us his worthless figures, the result of his male-and-female mixture, which he has labelled "persons," stating that these hermaphrodites died at the rate of 5·74 to every 10,000 (hermaphrodites) living in the district of Berwick, and leaving the interested public the impossible task of finding out for themselves whether the mortality amongst women from cancer is increasing or decreasing in this district.

Ex uno disce omnia. I have said enough to show the absolute necessity of separating the sexes in all matters connected with the vital statistics of the country, and to show how gross the blunder is that the present Registrar-General has been ordered to commit, the blame of which he throws upon the Medical Department of the Local Government Board. The President of that Board in turn, however, throws it upon the Register Office; and the Home Office is bewildered, if I may judge from my correspondence, as my complaint involves a charge of "scamping" work for which the nation has paid very heavily, and medical science in the present and near future will have to pay still more heavily; for valuable time has already been lost, and must yet still further be lost, before it is possible to amend this defective Supplement with the well-stored materials which Dr. Farr left behind him. Unfortunately, this distasteful subject has been obliged to be introduced, as the majority of our profession and few of the public can be acquainted with the real cause of the sudden arrest of the progress of the science of vital statistics in this country, and how it is that the Supplemental Reports, which once gave the English General Register Office a world-wide fame under the auspices of Major Graham and Dr. William Farr, have become altered in character and worthless in results since their resignation. Supposing it to take five years to compile one of these Supplements, we are now at least twelve years in arrears of the vital statistics of our country; on the other hand, had the Decennial Report for 1871-80, the materials for which Dr. Farr had collected and left behind him at Somerset House, been issued in a workmanlike manner, we should at this present moment have had thirty years vital statistics before us instead of only twenty, arranged for each of the 630 districts as above described, and the value of such a series of Decennial Reports on an uniform plan would have been incalculable for the elucidation of such difficult problems as the geographical distribution of cancerous disease and the twenty other specified causes of death amongst males and females.

At present the registration district is the only subdivision of our country that can be used to advantage in medical geography—that is, in the pursuit of such a subject as the present one. Before his death Dr. Farr expressed a hope

that ere long the 2080 sub-districts would soon take their place. When this was expressed he little thought how soon the districts even were to be rendered useless. However, the rule in medical geography is to divide the country as minutely as practicable, and to let each subdivision be the source of independent facts, which afterwards may be grouped together according to the natural configuration of the country, water-courses, &c. So far, the districts have been the only centres for the collection of the late Registrar-General's and Dr. Farr's facts. Neither the Annual Reports nor the Quarterly Returns would help the student in following out the subject which is now engaging us. In the former the bare number of deaths from each of the several causes are given for the districts, without reference to either age or sex, and the sub-districts are only used to show the gross annual death and birth returns in each. The Quarterly Returns simply contain the number of deaths during the previous three months from certain zymotic diseases for each of the sub-districts, without reference to age or sex; so that we are entirely dependent upon the Decennial Supplements for the facts that are alone useful to the medical geographer. The arrangement of these facts, in accordance with the plan of Dr. Farr already described, was nearly all that could be desired; and it is to be hoped that some competent person will soon be appointed to carry out the plans for 1871-1880, materials for which are waiting ready to be made up in the General Register Office.

I need hardly urge upon the readers of THE LANCET the necessity of always availing ourselves of the smallest subdivision of a country's areas, in which the required facts have been arranged, when dealing with such questions as the one before us. In pursuing similar investigations for sanitary purposes I have begun with the district, then searched in succession the sub-district, town, or village, and then streets, until we come to the very house where the disease lurks. The distribution of all diseases, when possible, should be studied in the same way. The necessity of pursuing such a course is so self-evident that I should hardly have thought it worth while to mention it had it not been for the fact that the present Registrar-General ignores the districts altogether and depends upon the counties' figures for his report on the distribution of cancer. But he finds these counties not large enough, so he flies to the divisions, saying, "Possibly many irregularities and apparent incomprehensibilities of the table might disappear if a longer period than ten years, or *larger areas than counties*, were taken as a basis. Instead, therefore, of taking counties, let us take the *eleven divisions* of the country" (p. 22); and so he takes the divisions and leaves the districts out of the question, for he finds that he has made them so useless by his confusion of sexes, that he is glad to leave behind him their "irregularities and incomprehensibilities," which do not tally with his idea of the geographical distribution of disease.

(To be continued.)

CASES OF OBSCURE DISEASE OF THE CÆCUM.[1]

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THE three cases here recorded present so many points of interest, and two of them are so uncommon in their progress, as to deserve attention.

CASE 1.—*Columnar epithelioma of the cæcum, giving rise to a large hard iliac tumour, followed by suppuration and partial relief, and ultimately by death from intestinal obstruction.*—This patient I saw with Dr. Bull of Chislehurst, in December, 1886, to whom I am indebted for the following notes. In June, 1885, the patient, a lady aged sixty-five, suffered from a swelling in the right iliac fossa considered to be due to typhlitis. This subsequently underwent suppuration, and discharged spontaneously just inside the anterior superior spine for some five weeks, leaving, on closing a puckered scar. Up to October, 1886—i.e., for more than a year—she got about, but an increasing painful flexion of the hip caused her again to consult Dr. Bull with a view to relief. Division of the cicatricial tissue in the scar enabled the leg to be straightened for a time, but contraction again ensued In December, 1886, Dr. Bull (in a letter to me) described a swelling in the iliac fossa, which he thought might be a sarcoma, and to which he attributed the increasingly painful flexion of the leg. On Dec. 5th we saw the case together, and found considerable flexion of the hip, with a hard and tense cicatricial band in the site of the old sinus. The iliac fossa was filled by a resisting hard mass closely combined with the iliac crest, so that this prominence appeared to be enlarged. There was no fluctuation to the feel, and the swelling was not tender. The cæcum, or rather a coil of bowel, was now and then seen to rise internal to the swelling, and to disappear with a gurgle. There was no intestinal obstruction and no sickness. Knowing how hard inflammatory swellings often are in this situation, I punctured the mass, driving a grooved needle deeply in above the iliac crest. A few drops of blood were removed. The needle had evidently penetrated a hard solid substance. There was no protrusion on the dorsum ilii, as when perforated by a growth. Assuming the iliac mass to be a new growth—for its size and hardness and the negative result of the exploration were opposed to the diagnosis of an inflammatory swelling,—the next point to settle was its origin. Had it arisen in the bone, or was it a primary epithelioma of the cæcum? The extreme hardness and the evidence of implication of the bowel inclined to the latter view, while the evident implication of the iliac crest pointed to the former. Personally I inclined to the diagnosis of epithelioma of the cæcum extending outwards into the fossa and infiltrating the bone. On this view there remained to be explained the previous suppuration and its possible connexion with the present state of things. A primary typhlitis with epithelioma arising in the site of the old perforation suggested itself, or that the disease was from the first an epithelioma of the cæcum which had perforated, given rise to suppuration, that the pus had escaped, and that the opening in the bowel having been closed by the growth, the discharge had ceased, giving relief to the peri-cæcal inflammation. On this view we anticipated one of the following terminations to the case: (*a*) extension of the disease to the peritoneum and liver, with possibly ascites and death by exhaustion; (*b*) suppuration again ensuing and extending to the peritoneum; (*c*) intestinal obstruction. Already there was evidence, in the rising of the coil and its disappearance with a gurgle, of implication of the bowel, though whether by infiltration with growth, or as the result of an old adhesion giving rise to a fold in the gut, could not be determined. The fact, however, that it was of recent origin pointed to the former view. We also thought it possible that owing to the obstruction perforation might take place above the narrowed part of the bowel. On Saturday, Feb. 5th, the bowel was more distended than usual, and could not be reduced, as on former occasions, by manipulation. The next day there was evident signs of peritonitis, and on Monday she died. At the post-mortem examination general suppurative peritonitis was found. The cæcum, or first part of the colon, was enormously distended and full of grumous fæcal matter; upon its wall was a gangrenous patch with one or two small perforations, from which gas and fluid escaped on pressure. Close to this part was a tight stricture admitting the tip of the forefinger. The bowel was closely adherent to the large firm mass felt in the iliac fossa, but could be detached from it. The mass filled up most of the iliac fossa, and when removed left the bone eroded. The infiltration involved the scar and the psoas and iliacus muscles, and extended along the spinæ as a diffused glandular thickening. The portions of growth and the gut sent me by Dr. Bull, with his account of the necropsy, seemed at first sight to favour the view that the case had an inflammatory origin. The piece of colon showed an annular epitheliomatous ulcer two inches below the ileo-cæcal valve, causing excessive narrowing. The head of the cæcum was much dilated. The lower end of the ileum was puckered by the growth. The mesentery showed secondary nodules, and no doubt the large iliac mass was also glandular in origin, and had not arisen by direct extension. The appendix lay behind the cæcum; a probe passed through it led into the mesentery just outside the strictured gut. This body appeared to be healthy, its extremity having been cut off in removing the bowel. The specimens from the iliac mass were unusually hard and dense, and traversed by bands of fibrous tissue. The microscope, however, revealed a per-

[1] Read before the Hunterian Society.

fect example of columnar epithelioma, thus establishing its origin from the bowel and settling the pathology of the case. The post-mortem appearances point to the epithelioma as being the cause of all the symptoms. As stated above, the specimen shows a great deal of puckering where the epithelioma is situated, the bowel being partly folded on itself, and closely adherent also to the mesentery. Somewhere in this adherent mass a perforation may have existed, and the appearances confirm the suggestion that such an opening had been closed by these adhesions. A summary of this case gives a total duration of at least one year and eight months. Probably it was longer, for when first seen a swelling existed. Another point of importance is the comparatively good health enjoyed for more than a year after the discharge of the abscess, during which time the iliac swelling was gradually and painlessly forming. Before offering any remarks upon this case I will read another similar in many points.

CASE 2. *Columnar epithelioma of the cæcum, with symptoms extending over three years and a half.*—John M——, aged fifty-nine, messenger, was admitted into Guy's Hospital on April 4th, 1877, under the care of Mr. Cooper Forster. Eighteen months before, he first had pain in the right lumbo-iliac region. For this he attended St. Thomas's Hospital without relief. About six months later, that is about a year ago, he observed a small lump outside the umbilicus. This gradually increased, and ten weeks ago approached the anterior superior spine. When admitted he had a hard swelling in the right lumbar and iliac regions, reaching below to the anterior superior spine, and in the direction of the umbilicus for four inches from the spinous process. The mass was about four inches in all diameters. No definite fluctuation was felt, and the diagnosis was doubtful. The situation of the mass suggested a cæcal origin; but it was thought to be almost too hard for inflammatory swelling secondary to typhlitis. It was also thought to be a periostitis of the ilium, in favour of which were two points: past syphilis, and his habit of carrying heavy ledgers on this hip. The diagnosis of sarcoma of the bone was also entertained. There was no disturbance of the bowels. He left relieved. In December of the same year he came again to be seen. He had followed his occupation regularly ever since. He still suffered pain, and said he had at times passed blood from the bowel with relief. There was hardness to be felt, extending towards the last rib. He was attending at King's College Hospital, under Mr. H. Smith. In February, 1878, he had more pain; the swelling remained about the same. On March 1st, 1878, he was readmitted. The swelling was much larger, very tender, and extended from the last rib to the ilium. It was hard, the skin was brawny, fluctuation indistinct. The man had lost flesh. On the 5th the swelling had increased and fluctuation became distinct. Two days later it was opened, when a large quantity of foul pus escaped. The iliac crest was found to be bare. On the 18th he was discharged, a very little pus escaping from the sinus. On March 22nd, 1879—i.e., a year later—he was readmitted with a fæcal fistula at the site of the old incision. It does not appear from the report whether the wound had been closed for a time or not, but it probably had done so. He was emaciated and very ill. There was much induration about the orifice, and a hard mass still existed in the iliac fossa. Both feet were œdematous. He died exhausted on the 26th. At the inspection a fungating mass of growth occupied the cæcum and involved a part of the ilium and the iliac crest. It had undergone partial colloid degeneration. The ilium was infiltrated with growth, a knife being easily driven into it. There were numerous secondary growths in the liver, and these, with those in the cæcum and ilium, proved to be cylindrical epithelioma. A summary shows a total duration of three years and a half, a swelling for at least three years, and a sinus for one year.

These two cases present a striking resemblance in many particulars. In both the first sign was a hard swelling in the region of the cæcum, in both the swelling suppurated; in one complete closure of the wound followed, in the other a sinus persisted. In both a long period of relief followed the suppuration. They are both rare cases, in the fact that the iliac swelling was so large and hard, and in the fact that this swelling was composed of a cylindrical epithelioma. The very small portion of the bowel implicated in Dr. Bull's case is also remarkable when contrasted with the iliac swelling, as is the fact that no perforation of the bowel of old standing was found. It was impossible to say whether or not an old perforation of the appendix had occurred.

CASE 3. *Large hard swelling in right iliac fossa; subsequent limited suppuration, probably typhlitic in origin.*—In January of this year I saw, with Dr. Fyson of Walthamstow, a lady, aged about twenty-seven, suffering from a large swelling in the right iliac fossa. It reached and obscured the iliac crest, but did not descend quite to Poupart's ligament. It was very hard and only slightly tender, and was well defined above and inside. About an inch below the crest there was also an elastic rounded swelling over the dorsum ilii. She had been ailing some weeks, and the swelling had been noticed a fortnight. She was married, and had had one child, now about five years old. There was no evidence of spinal, sacro-iliac, or hip disease, nor did the swelling extend into the pelvis, as in pelvic cellulitis. The patient had moderate hectic fever, and showed all the signs generally of pus. An exploratory puncture was not allowed. The affection seemed to be either an abscess, arising possibly from an old typhlitis surrounded by much firm cellulitis, or a gumma or a sarcoma. The elastic swelling over the dorsum pointed to a perforation of the bone, since it could not be traced upwards over the crest, and this seemed in favour of a sarcoma rather than gumma; while, again, the hectic indicated a gummatous origin, though we knew that such a fever might occur with growth. She was put on full doses of iodide and mercury, and a month later the iliac swelling was harder and less tender, while that over the dorsum was more diffused, and in it fluctuation could now be detected, but it was of that uncertain kind often found with a gumma. The crest was more obscured. There was little or no pain. The hectic continued. In view of the slight improvement it was decided to push the remedies, since exploration was still refused. Some three or four weeks later the skin over the posterior swelling became discoloured; she had become thinner, and had lost ground, and consented to an operation. Under chloroform an incision evacuated dark, foul, dirty pus, and the finger entered an irregular cavity, which led upwards and passed by a narrow channel *over* the crest towards the iliac fossa. The bone was not perforated; the evacuation produced no diminution in the iliac swelling, nor did pus escape on compressing it, so that the diagnosis still remained uncertain. A drainage tube was passed as deeply as possible, and the wound was dressed antiseptically. It now transpired that in the previous November she had been seized with sudden and severe pain in the right iliac fossa, and had been ill a few days; a history pointing to typhlitis, confirming the original suggestion. Rapid improvement followed; she made flesh and regained health, and the iliac swelling gradually disappeared. Some three months later I saw her again for a swelling over the transverse process of one of the lower lumbar spines. It was of uncertain character, and appeared to be the end of a sinus, possibly of that which still existed at the site of the original incision. This was explored and found to be, as expected, the end of the sinus, which passed backwards below the iliac crest. This was freely opened and drained, and recovery rapidly followed, and now (Oct. 1887) she is quite well, having regained weight and strength. Of the two possibilities, gumma and abscess arising from old typhlitis, I am inclined to adopt the latter, and to look upon the case as one of very limited perforation of the appendix which subsequently healed, the small quantity of pus burrowing its way very slowly. When we recollect that pus will travel from the appendix right across the back of the abdominal cavity, and after a long and tortuous course open in the left loin, it is not too much to assume that this was typhlitic in origin.

These three cases illustrate some of the difficulties attending the diagnosis of swellings in the region of the cæcum. The dense fascia, as is well known, renders an abscess in this situation unusually hard, and liable to be mistaken for a new growth arising either from the bowel or from the ilium itself. For this reason exploration with a needle or trocar should be conducted in all doubtful cases. Dr. Bull has communicated to me the case of a female relative of his, aged sixty, who suffered from a swelling in the left iliac fossa of a month's duration. The temperature was 101°, the tumour was increasing, there was some cachexia, and here an unfavourable prognosis of cancer was given. Subsequently an abscess was opened, a considerable quantity of foul pus being evacuated, and the sinus after a time closed. There was a certain amount of obstruction, which has continued, so that malignant disease may be in existence as in the first two cases. The presence of hectic fever in this and

in the third case above recorded points, no doubt, to an inflammatory origin. It must be remembered that severe hectic may accompany the presence of a large inflammatory mass—as, for example, in pelvic cellulitis or a gumma—without suppuration; while, again, a rapidly growing sarcoma may be attended with hectic. In Dr. Bull's case the contraction of the hip was a noticeable feature, as it was for this the patient sought relief. In the third case, the presence of the elastic swelling over the dorsum ilii with a hard unyielding mass in the venter certainly suggested a sarcoma of the ilium, and in all probability an exploration of the iliac mass would have given a negative or doubtful result, for it did not diminish immediately on the opening of the smaller swelling. It must have been composed chiefly of hard inflammatory material, the absorption of which gave rise to the hectic fever. Besides a sarcoma of the ilium, an epithelioma of the cæcum, and an inflammatory mass of typhlitic origin, as causes of large hard swellings in the cæcal region, there is one other I should mention as occasionally giving rise to difficulty in diagnosis, and that is a ruptured aneurysm, one in which the escape of blood has been slow and in which no pulsation occurs. I have once seen this give rise to œdema of the leg.

The treatment of these cases has been sufficiently indicated in the reports, and I think, so far as the last case is concerned, and with it all suspicious cases of abscess in this region, an early exploration should be made, and that certainly this should be conducted in all cases of typhlitis when the swelling does not subside or where it increases decidedly, more especially if at the same time the general health suffers. An exploration with a grooved needle or an aspirator can do little harm, and if pus be found it may be safely evacuated even if the abscess seem to be still well beneath the abdominal wall. We know, unfortunately, that in most cases the pus finds its way into the peritoneal cavity, and whether we can prevent this remains to be seen, probably not when the perforation of the appendix is sudden; but I believe that some cases may be saved by an early exploration. And this is also necessary in those as I have said, where the swelling persists with general signs of suppuration, even if the swelling be small; for when one considers the great variation in the position of the appendix, it is to be expected that the collection of pus may be greater than is indicated by the size of the swelling.

In concluding, let me once more say that the main point to which I wish to draw attention is the production of a large hard iliac swelling and of a fæcal sinus by an epithelioma of the cæcum, and to suggest that in cases of suppuration in this region and in the corresponding situation in the left side, occurring in old people, we should bear in mind the possibility, if not probability, of new growth in the bowel.

CASE OF HYDRO-PNEUMO-PERICARDITIS.

BY JAMES KERR LOVE, M.B., C.M.,
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THE following very unusual case of what I believe to have been hydro-pneumo-pericarditis came under my notice during the latter part of 1887.

On August 24th I saw J. W——, a bank accountant, aged twenty-eight, who complained of pain a little below and to the right of the left nipple. He had some cough, and near the painful spot I could hear a slight and only very occasional rubbing, which I then put down as pleuritic friction. The temperature was a little over 100°. A blister was applied, and on the following day the symptoms were less, and no friction was noticed on careful auscultation. I did not see the patient for two days, but on my third visit he had still a little pain and cough, and there was a distinct ventricular-diastolic pericardial rubbing present. I had no doubt that this was pericardial. On the following day (Aug. 28th) the patient's wife called attention to a loud click which she heard, and which I then heard at a distance of two or three feet from the patient. It was ventricular systolic in rhythm. The ventricular-diastolic friction was still present. But the patient was now almost free from symptoms, and had normal temperature, and as his annual holiday commenced at this time I asked him to go to Rothesay, with strict injunctions as to quiet and rest. He returned on Sept. 8th. Both the ventricular-systolic and ventricular-diastolic sounds were present, the former so distinctly that it sounded all over my consulting-room. I took the patient at once to Dr. Alexander Napier, to have the evidence of another ear, and wrote to Professor Gairdner and Dr. Samson Gemmell, with the view of arranging for their seeing the patient; but both these gentlemen were then out of town, and did not return in time to see the case at this stage. Dr. Napier and I could hear the click when the patient was seated at the window of Dr. Napier's consulting-room, and we stood at the door, a distance of nearly twenty feet. It is difficult to describe the sound. At that time I had no terms, such as "water-wheel," used by authors in describing similar sounds, to guide me, but I succeeding in producing a similar sound by placing the tongue behind the upper incisor teeth and sucking it backwards till its point slipped and struck the floor of the mouth with a liquid resonant glug. It was irresistibly suggestive of air and fluid to both of us, and Dr. Napier named hydro-pneumo-pericarditis as a possible cause. I watched the patient for one or two weeks and found that the sound was less and less constantly present. For some days it was generally present on walking and after meals, but sometimes it began in the most unaccountable manner during the quiet of the night, and on Sept. 16th the ventricular-diastolic murmur had quite gone and the ventricular-systolic click was replaced by friction, which I have no doubt was pericardial. No accurate map of the cardiac percussion was made, for I did not at first fully appreciate the peculiarity of the case, but a note in my journal with reference to the fourth or fifth day of illness describes the dulness as indefinite and decreased, and repeated examinations I made gave an unusually clear note over the usually dull cardiac area. Another remark occurring in the early notes, and existing as a very vivid and definite impression in my mind, has reference to the difficulty of hearing the heart sounds near the left nipple, and to the fact that these sounds were very distinct, as were also the murmurs near the lower end of the sternum. At these examinations I had no theory such as I have since formed as to the cause of the click. The facts that the patient was now at business and that I was off on holiday prevented my seeing him for a month, but on Oct. 16th his heart was normal both to auscultation and percussion, and he had been healthy in the interval. His heart remained normal, or at least free from any murmur, during the rest of his life, although on Oct. 17th he was seized by obscure and violent head symptoms, terminating in death in twenty-six days. As these have only a possible connexion with the heart lesion, and as I was unable to obtain a post-mortem examination, I shall refer to them but briefly.

The head symptoms divided themselves into three periods. The first lasted about a week, and was marked by very violent headache, chiefly occipital, but extending towards the vertex, moderately high temperature, and rapid pulse. No paralysis of any cranial nerve, no difference in the size of the pupils, or other local sign, was present to interpret the headache. Professor Gairdner saw the patient on Nov. 19th, and expressed himself as puzzled. Dr. Wm. McEwen saw him on the 22nd, but, while considering the existence of a brain lesion certain, he thought the facts too indefinite to enable him to name it. The second period lasted seven or eight days longer. During this time there was somewhat less headache, the temperature tended to fall, but there was a distinct left internal squint, with tendency to twitching of the limbs, chiefly those of the left side. During the last ten days of life the symptoms became almost typically typhoid, with gradual disappearance of the squint, deepening coma, irregular but on the whole rising temperature, and death on the twenty-sixth day. Dr. Gairdner writes to me with reference to the case without giving any opinion as to its nature; but Dr. McEwen who saw the patient twice, agreed with me in thinking the brain symptoms to be due to meningitis.

Cases of hydro-pneumo-pericarditis are of rare occurrence. But many undoubted cases are recorded. In the *London Medical Record* of April 15th, 1880, Dr. Burney Yeo notices three cases reported by Dr. Hermann Müller of Zurich. The first was caused by the rupture of a purulent pericardial effusion into the lung; the second arose traumatically when a man was crushed between two heavy stones; and the third occurred from a knife stab in the left breast. Dr. Müller, in summing up his cases, notices the various ways in which gas may get into the pericardium, and, after stating such causes as are instanced in his own cases, he put under a

separate heading, "The spontaneous development of gas from decomposition of an exudation."

Dr. J. W. Begbie, in the *Half-yearly Abstract of Medical Sciences* for 1863," vol. i., p. 117, gives a case where he diagnosed "cancer affecting the lower part of the œsophagus when in contact with the pericardium; pericarditis with effusion from extension of disease in the former; finally, rupture of the œsophagus and passage of gas into the pericardium." The post-mortem examination, conducted by Dr. Haldane, determined the correctness of the opinion in all essential particulars. In Dr. Begbie's remarks on the case, he notices that Laennec puts great stress on the fact that the sounds in hydro-pneumo-pericarditis are heard at a distance. Amongst recorded cases this feature is most strongly marked in a case of Dr. Stokes. It was the most remarkable feature of my case. I shall have to refer to the case reported by Dr. Stokes, as in other respects being very similar to mine.

In Dr. Walshe's book on Diseases of the Heart, the author refers to a case of his own where perforation from the œsophagus had taken place.

Dr. Graves, in his Clinical Medicine, gives a case where a hepatic abscess burst into the stomach and pericardium, and where a metallic sound was heard. Here the air was clearly derived from the stomach.

Dr. B. M'Dowal gives a case of pneumo-pericardium caused by a communication with a cavity in the upper lobe of the right lung. The physical signs gave evidence of a large cavity containing air and fluid, indicated by metallic tinkling and splashing of fluid caused by the action of the heart.

Dr. Meigs, in the *American Journal of Medical Sciences* (vol. lxiv.), describes the sounds in a case of hydro-pneumo-pericarditis where the air was admitted by a communication with the œsophagus. "The sounds," says Dr. Meigs, "were audible to a person sitting by the bedside three or four feet off. They had a splashing character, and suggested to myself the sounds produced in an old-fashioned upright churn. Listening over the heart, both the sounds and the friction murmur were accompanied by the most extraordinary metallic reverberation I have ever heard. The presence of air and fluid was at once suggested to my mind." The necropsy showed a communication with the œsophagus so small that it was only detected by the most careful search, and the pericardium was filled with gas and fluid. In these cases the diagnosis was verified by post-mortem examination. I quote them to show how hydro-pneumo-pericardium is usually produced, and to establish at least an acoustical connexion between them and the other set of which I take mine to be an example. I assume of course that the formation of gas as the result of decomposition in pericardial effusion is possible. To produce very loud and characteristic sounds no large quantity of gas or fluid is necessary, for sounds sufficiently loud and characteristic can be produced, as I have already described, by the tongue in the mouth, even when that cavity is shut and in no way specially enlarged. Many writers discuss the question of hydro-pneumo-pericarditis, and most admit the condition as possible, apart from disease of any other organ. I will quote two cases so explained by their reporters.

In Dr. Stokes' book on "Diseases of the Heart" (1854), the author gives a case of air with fluid in the pericardium, where at first the rubbing sounds were in no way unusual, but afterwards became so loud and singular that the patient and his wife, who occupied the same apartment, were unable to obtain a moment's repose. "On examination," says Dr. Stokes, "a series of sounds were observable which I had never before met with. It is difficult or impossible to convey in words any idea of the extraordinary phenomena then presented. They were not the rasping sounds of indurated lymph, or the leather creak of Collin, nor those proceeding from pericardiac with valvular murmur, but a mixture of various attrition murmurs, with a large crepitation and a gurgling sound, while to all these phenomena was added a distinct metallic sound. The stomach was not distended with air, and the lungs and pleura were unaffected. But the region of the heart gave a tympanitic *bruit de pot felé* on percussion. In the course of about three days the signs of effusion of air disappeared, leaving the phenomena as they were at the first period of the case. The convalescence of this patient was slow, and the rubbing sounds continued for an unusual length of time. His recovery was ultimately perfect."

The second case is given by M. Bricheteau in the *Archives Générales de Médecine* (4th series, vol. iv., p. 334), and occurred in a man of fifty years of age, who entered the Necker Hospital on March 27th, 1835, and died on April 3rd following. From March 27th to April 1st it was supposed that he had some inflammation of the lungs, but on April 1st he was so much distressed that M. Bricheteau examined the heart, and heard a sound attending each movement of the heart, which he and several assistants thought must be due to a fluctuation or wave of liquid corresponding to each cardiac contraction, and which he compares to the noise made by the floats of a mill-wheel as they strike the water, or to that caused by blowing strongly through a tube into a vessel containing water. "The cardiac region gave no dulness on percussion; on the contrary, it was more sonorous than natural." At the necropsy the pericardium was found enlarged, tense, with a clear sound on percussion, and when opened gas of a very fetid odour escaped with a whistling sound. About eight ounces of yellowish purulent fluid, fetid and containing albuminous flocculi, were found in the sac. M. Bricheteau supposed that the pneumatosis was the result of decomposition of a portion of the serous fluid which had been secreted by the inflamed membranes.

Now, the case I have given must be put alongside of those of Dr. Stokes and M. Bricheteau. The patient was a healthy young man, without any previous history of cardiac disease or rheumatic tendency. He has been under my care occasionally during the past four or six years for trifling illnesses, and I have had opportunities of knowing much of his general condition and habits during that time. There was no distension of the stomach. The remarkable click so suggestive of air and fluid was preceded, accompanied, and succeeded by friction sounds which, I have no doubt, were pericardial. And there were the other positive proofs afforded by the distance of the heart sounds near the nipple and the tympanitic cardiac percussion.

THE TREATMENT OF HYDROPHOBIA BY HYPOSULPHITES.

BY A. H. NEWTH, M.D.,
LATELY MEDICAL OFFICER, COUNTY LUNATIC ASYLUM, HAYWARDS HEATH.

HYDROPHOBIA is, without doubt, the result of a specific poison introduced into the blood. It is probable that this poison is of the nature of micro-organisms somewhat akin to those observed in septicæmia. Possibly future investigations may discover a specific form of micrococci, bacteria, &c. Therefore, it seems reasonable to suggest the administration of some drug which will destroy these organisms. Nearly thirty years ago Professor Polli of Milan suggested the use of sulphurous acid in cases of icorrhæmia. He proved by experiment that dogs who had putrid blood injected into their veins quickly died. But if hyposulphite of sodium was previously mixed with the blood they were not affected. Further, if the hyposulphite was administered to the dogs either before or immediately after the injection of putrid blood they did not suffer.

I have used this remedy repeatedly in cases of blood-poisoning with most marked success. For instance, a patient has received a punctured wound which has inflamed, the lymphatics have become swollen and reddened, the parts are extremely painful, and there are rigors. Within a short time after the exhibition of the hyposulphites the pain has decreased, the parts are less inflamed, and all the symptoms of poisoning have abated. During a post-mortem examination I accidentally punctured my hand; shortly after a red spot appeared on the site of the injury, which enlarged and became very painful, my hand and arm swelled, and I felt very ill. I examined some of the serum from the pustule under the microscope, and found it teeming with micrococci and bacteria in rapid motion. After taking several doses of hyposulphite the pain almost ceased and the micrococci were seen to be perfectly motionless. The swelling soon subsided, and I experienced no ill effects, though the pustule took some time longer to heal.

Professors Braun and Bernatzik have asserted that the hyposulphites, being nauseous in taste and producing irritation of the bowels, are therefore not suitable for internal administration. My experience has proved the fallacy of these assertions, for I find even children take them readily, and I have never met with the slightest un-

pleasant symptoms from their use. Probably this may in some measure be due to the fact that I am in the habit of prescribing the hyposulphites in combination with bicarbonate of soda and sulphate of magnesia in peppermint-water. For children I simply give it with syrup and caraway-water. Though my experience is not sufficient to establish the value of this remedy decidedly, it is so far satisfactory that I unhesitatingly prescribe it in any cases where there seems to be symptoms of blood-poisoning. In aphthæ, for instance, it seems to work like a charm, and in boils, scrofulous abscesses, &c., it really appears to do great good. I have also prescribed it with success in diphtheria and puerperal fever. It seems to me that, as hydrophobia is without doubt a form of septicæmia, the hyposulphites might do good in this terrible disease. They certainly could do no harm, and therefore I would suggest a fair trial of this remedy, not only when the disease has developed itself, but as a prophylactic. After a bite by a mad dog I would give five or ten grains of the hyposulphite of sodium or magnesium (the latter is richer in sulphurous acid) for the first three or four days every four hours; then three times a day for a week; then twice a day for another week; then every morning early for one month; recommending a Turkish bath twice a week. When the disease has developed I would prescribe the hyposulphite every hour or every two hours, with vapour or dry hot-air baths, or prolonged warm-water baths containing some hyposulphite in solution. The hypodermic injection might also be tried, especially if the patient is unable to swallow. In other cases the sulphurous gas might be given per rectum. By such means as these I firmly believe hydrophobia may be cured, and trust that those who have the opportunity to do so will try them.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MIDDLESEX HOSPITAL.

A CASE OF LONG-CONTINUED PRIAPISM AFTER COITUS; REMARKS.

(Under the care of Mr. HULKE.)

IT is seldom that cases such as the following come under the notice of the surgeon, and the question as to future loss of sexual function, which is raised by Mr. Hulke, is important. In the Mirror of Hospital Practice for Feb. 16th, 1867, in the remarks on a case of Mr. Birkett's, attention was drawn to other cases: in one which had been under the care of Mr. Luke, a patient aged twenty-six, who suffered for four months, is stated to have recovered, but information is not definitely given as to the continuation of the sexual function; in another, recorded by Callaway in 1824, the ultimate result is not mentioned. It would be advisable to have further evidence on this point before coming to a conclusion. Incision into the affected part for the relief of pain and swelling has been tried, but is not recommended, measures similar to those employed by Mr. Hulke proving generally successful.

On Dec. 27th, 1886, an artisan, aged thirty-four, was admitted into Founder ward with priapism. His penis was stiffly erect, very turgid, hard, tender, and painful. The greatest tenderness corresponded to the attached part of the left crus. The patient said that one week previously, after drinking heavily of cider, he had intercourse with his wife on going to bed at night. Neither he nor his wife was aware of the occurrence of anything unusual in the sexual act. He afterwards fell asleep. On waking next morning his penis was still erect, and it was also very painful. This condition persisting, and the painfulness of the organ increasing, he was at length constrained to come to the hospital for relief. A mixture containing sulphate of magnesia and tartar emetic was given to the man at short intervals until he was nauseated and purged, and after this he was directed to take bromide of potassium in doses of fifteen grains three times daily. The penis was smeared with extract of belladonna and unguentum hydrargyri.

On January 3rd, 1887, a week later, no obvious alteration in the state of the organ having occurred, the above treatment was abandoned and the continuous application of ice substituted for it. This was followed by a marked, but very slowly progressive, decrease of the turgescence. On January 17th the penis had become soft, pendulous, and painless, so that he was then able to bear the pressure of his dress and to leave his bed. Next day he returned to his home. At that date the only remaining objective trace of the former condition was a small hard knot near the posterior extremity of the attached part of the left corpus cavernosum. Abstention from coitus during several weeks was strictly enjoined. He was next seen on February 19th, when he reported that he had obeyed the injunction till two nights previously, when he attempted coitus, but failed through incompleteness of erection. The further history is unknown.

Remarks by Mr. HULKE.—Cases of persistent priapism other than those associated with lesions of the spinal cord appear sufficiently rare to warrant this instance being placed on record. The turgescence in the spinal cases is seldom complete; the organ, being only semi-turgid, droops—it is not stiffly erect. In this instance it was tensely distended and rigidly erect. The occurrence has been attributed to inflammation of the organ, to a local neurosis, obstruction of the erectile tissues by extravasated and coagulated blood. The depressant and sedative measures adopted when the man first entered the hospital were prescribed on the first and second supposition, but they produced little or no effect, whereas the application of ice proved decidedly useful. A probable explanation of the case is that, owing to the maladroitness incidental to intoxication, the organ received a wrench that produced a partial laceration of the attached part of the left crus, which was, in short, *sprained*. The injury was attended with extravasation of blood and followed by inflammation. The excessive tension of the part sufficiently accounts for the great pain. In cases of this class permanent disability of the organ is believed to have not unfrequently resulted. Whether this has occurred in the instance now recorded is unknown, but the failure at a date when an almost normal condition of the organ in quiescence was apparently present lends some degree of probability to the idea that this patient will also have become permanently incompetent for the sexual act.

HOSPITAL FOR SICK CHILDREN.

INTUSSUSCEPTION TREATED BY INFLATION OF AIR; RECOVERY; REMARKS.

(Under the care of Dr. CHEADLE.)

FOR the following notes we are indebted to Dr. Penrose, registrar of the hospital.

S. P——, a slightly rickety infant of fifteen months, was brought to the hospital about 5 P.M. on Nov. 8th, 1887. The mother's account was as follows. On Nov. 5th the child seemed restless, for which she could find no cause. On the two following days it seemed perfectly well. At 6 A.M. on the morning of the 8th she noticed that the child was evidently in great pain. At 8 A.M. she gave it a little peppermint-water, which was almost immediately vomited. Soon after this the child passed a motion consisting of thick blood, and continued to pass blood almost hourly until 3 P.M. It had also vomited three times altogether between 8 A.M. and 3 P.M. From 6 A.M. until 3 P.M. the infant had been in very great pain, and the passage of the blood was always accompanied by very severe straining. At 3 P.M. the little patient was seen by Dr. Garlick, who made a rectal examination, and reports that he found "a tumour in the rectum of unmistakable shape; the fingers could be swept quite round it, and there was a dimple at the apex of the conical or sausage-shaped mass." The mother said this examination seemed greatly to relieve the child, as all straining ceased, and only one small motion consisting of blood and slime passed afterwards.

On admission at 5 P.M. the child seemed remarkably comfortable, sleeping quietly in a perfectly natural position. On palpating the abdomen a distinct oblong tumour could be felt in the left iliac fossa, situated in the position of the left sigmoid flexure. On passing the finger up the rectum,

the lower end of the tumour could be just felt, and the finger could be passed partly but not completely round the included portion. The central lumen of the included portion could not be detected. Whilst being examined the child strained and passed some almost natural-looking blood, mixed with a large quantity of slime.

As the symptoms of the intussusception were so recent, and the child was not in any immediate distress or danger, notice was sent to Dr. Cheadle to inform him of the case, and to ask him what line of treatment he would wish to have adopted. He recommended inflation by air and gentle kneading of the mass through the abdominal wall. At 9.30 P.M. the child was first put under the influence of chloroform, and after one or two unsuccessful attempts with a small pair of bellows, which were not in good working order, a Higginson's syringe was used. By gradually distending the rectum, and at the same time manipulating the tumour through the abdominal wall with the forefinger and thumb of each hand, the tumour could be felt to recede towards the hepatic flexure, and as it receded the distended descending and transverse colon could be plainly seen through the abdominal wall. Beyond the hepatic flexure the tumour was not traced towards the right iliac fossa, and no sudden jerk or unusual movement was felt. The right lumbar region gave, however, a very tympanitic percussion note. The air was then allowed to escape per rectum, bringing with it about one ounce of mixed blood and slime. The air had been prevented from escaping during the process of inflation by gently pressing the walls together. The child was then given two minims of tincture of opium, and ordered one minim every four hours. It slept well all that night, and was quite bright the next day, the morning temperature being 99° F., which fell in the evening to normal. On Nov. 10th the opium was discontinued. On the 11th the child passed a perfectly natural semi-solid motion quite free from blood or slime, and has apparently completely recovered, there being no tenderness or anything to show that the infant is not perfectly healthy, other than the slight rickety beading of the ribs and enlargement of the ends of some of the long bones.

Remarks by Dr. CHEADLE.—This is the third successive case under my care in which intussusception has been successfully reduced by inflation. In addition to these, there has been a fourth under my colleague, Dr. Barlow. The previous cases are recorded in THE LANCET of Oct. 23rd, 1886. In three of these four cases the intussusception was recent; in the remaining one it had apparently existed more or less completely for about a week. The success of inflation in the cure of intussusception depends largely, no doubt, upon its early employment. The rapidity and ease with which the invagination was reduced in all these early cases show how readily it yields to a *vis a fronte* properly applied by elastic distension of the gut before it has become greatly swollen, and before the serous surfaces have become firmly adherent by the exudation of inflammatory lymph. Early diagnosis is therefore of the utmost importance. Yet although this is not difficult, the symptoms being marked and the existence of a characteristic tumour pathognomonic, such early diagnosis is but rarely made; the nature of the case is usually discovered too late, when the inflammatory changes set up by strangulation have rendered the condition hopeless. To the early recognition of the nature and gravity of the case in the present instance by Dr. Garlick its fortunate termination is largely due. It may be noted that in all these cases Higginson's syringe proved the most efficient instrument of inflation.

THE FRENCH HOSPITAL.—The annual banquet of the French Hospital in London took place on Saturday last at Willis's Rooms, his Excellency the French Ambassador in the chair. The Lord Mayor and Sheriffs were also present, with representatives from the Corps Diplomatique. During 1887, 11,236 out-patients and 422 in-patients were relieved, at an expense of £2266 18*s.* 6*d.* for maintenance and £274 18*s.* for management, the total income amounting to £3551 15*s.* 6*d.* Towards the building fund of the new hospital £10,000 has been collected, which will shortly be begun on land acquired for the purpose in Shaftesbury-avenue. Great satisfaction was expressed with the economical administration of this institution, and a large amount of money was promised at the meeting.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Relapsing Typhlitis treated by Operation.

AN ordinary meeting of this Society was held on Tuesday last, Dr. W. H. Dickinson, F.R.C.P., Vice-President, in the chair.

Mr. FREDERICK TREVES contributed a paper on Relapsing Typhlitis treated by Operation. In the majority of the cases of so-called typhlitis the appendix is the cause of the trouble, and the perityphlitic abscess is more usually an encysted peritonitis due to perforation of this process than to disease in the cæcum. The appendix may become the starting point of inflammation, by reason of congenital deformities; of changes that take place in its mesentery, producing bending; of the lodgment of foreign bodies or concretions, that are encouraged to remain unmoved, on account of the feeble muscular coat of the tube. This source of manifold disturbance can be destroyed by removal of the appendix, or by correcting any simple deformity of which it is the seat. The question of such interference was only considered in reference to relapsing typhlitis. The statistics of Fitz show that in 11 per cent. of the examples of this affection the patient was the subject of successive attacks. In one case quoted five attacks occurred in the period of eighteen months. The author was of opinion that relapsing typhlitis is due in a very large proportion of instances to some appendicular trouble, and is therefore a condition that may possibly be relieved by operation during the period of quiescence that follows an attack. A case of relapsing typhlitis in a man aged thirty-four was reported. After the subsidence of the second attack, and during a period of freedom from all symptoms, the author performed laparotomy and found a diseased appendix, which was dealt with. The patient made a perfect recovery, and has remained free from further relapses. The mode of dealing with diseased appendices was discussed.

Mr. T. HOLMES had operated on a case of relapsing typhlitis in a man aged thirty. A swelling was felt in the right iliac fossa, of immobile nature, suggesting the existence of a foreign body in the vermiform appendix with considerable thickening around. An incision was made as for ligaturing the iliac artery, and a greatly thickened mass was entered containing the vermiform appendix, which was torn in the manipulation. The appendix was probed, but no foreign body found, so the appendix was ligatured and the distal part removed. A good recovery followed, but the patient could not be said to be in so satisfactory a condition as in Mr. Treves' case. The appendix was adherent to the cæcum, and placed vertically in the direction of the ascending colon. He agreed with Mr. Treves' suggestion as to the method of removing the appendix. He related a case of cellulitis treated by free incisions. Fæces escaped from the incisions, and the necropsy showed that a dilated appendix was the source of the fæces.

Mr. HOWARD MARSH thought the chief importance of the paper lay in the suggestion that a large number of affections of this region having various names were probably due to the state of the appendix. He mentioned the case of a girl who died from peritonitis, from whom he had too late removed the appendix. The method of removal he considered to be good.

Mr. BRYANT was disposed to agree with the suggestions of Mr. Treves, but in the case described there did not appear to have been any great need for the operation, if he understood aright. He had never removed the vermiform appendix, nor had he met with a case in which he had thought the operation called for; but he did not deny that there might be a demand for such an operation.

Mr. WALSHAM had been for some time coming to the conclusion at which Mr. Treves had arrived, as to the part played by the vermiform appendix in peritoneal disease. He related a case in which the vermiform appendix was found on abdominal exploration to be gangrenous. It was amputated by means of a ligature, but the patient died suddenly the second day after the operation, without anything being found except localised peritonitis and enteritis. A case of relapsing typhlitis in a youth was related; the acute symptoms subsided, but a large abscess remained, the result of encysted peritonitis, and this was opened and freely drained, and the patient was doing well.

Dr. C. J. HARE had never seen in his practice a case that required surgical treatment. He advocated the employment of leeches as advantageous in severe cases of typhlitis.

Mr. J. W. HULKE said that leeches might fail to relieve, as in the case of a boy with perforation of the vermiform appendix, from which an abscess resulted and burst into the peritoneum with fatal effect. The diagnosis was often very difficult, and this was illustrated by the case of a man who had frequently suffered from dysentery and alcoholism. Abdominal symptoms led to laparotomy, when a mass of omentum much thickened was discovered, but no abscess, even after further exploration; a large drainage tube was left in, and the patient appeared to be much relieved for a time, but one week later an abscess formed and was opened near Poupart's ligament, with the result that the man recovered. In a most able paper Sands of New York advised prompt and early interference in cases diagnosed as disease of the vermiform appendix.

Mr. HENRY MORRIS alluded to some cases of perityphlitic abscess in which adhesion of the cæcum to the parietal peritoneum had taken place, and had been followed by extravasation into planes of connective tissue in the muscular walls of the abdomen.

Dr. DOUGLAS POWELL drew a distinction between two conditions much mingled—typhlitis and perityphlitis—which were as distinct as pneumonia and pleurisy. Cases of typhlitis and relapsing typhlitis might be chiefly produced by errors of diet. He considered the title of the paper unfortunate, for it would have been better to have used the term relapsing perityphlitis for the cases meant by the author.

Dr. DICKINSON agreed with Mr. Treves that perityphlitis was often due to disease of the vermiform appendix. It should be remembered that concretions were stratified calculi, and not foreign bodies. He could not but endorse the views of Dr. Hare, and had seen the most striking results from leeching.

Mr. TREVES considered that there was no other anatomical structure than the vermiform appendix which could be the cause of relapsing typhlitis if we excluded the ulcers due to tubercle and fæcal impaction. Why should the cæcum any more than other parts of the colon be selected for inflammation of relapsing kind. Although Mr. Bryant did not seem disposed to operation in the case related, yet the presence of great swelling of the distal end of the appendix could hardly have been relieved, considering the adhesions to the omentum and peritoneum and the thickening of the mesentery of the appendix. The interesting question opened by Mr. Morris he thought to be opposed to the habits and customs of the peritoneum which, under the influence of irritation, tended to become thickened; but if the inflammation spread to the non-peritoneal surface of the colon, then an easy route was opened up by which suppuration might travel into the connective-tissue planes around. In rely to Dr. Hare, he remarked on the frequency with which surgeons were called upon to treat abscesses of this region.

CLINICAL SOCIETY OF LONDON.

Diagnosis and Treatment of Ruptured Intestine without External Wound.—Rare cases of Intestinal Obstruction.

AN ordinary meeting of this Society was held on the 10th inst., Dr. W. H. Broadbent, F.R.C.P., President, in the chair. The papers, though surgical, were very interesting also from a medical point of view.

Mr. MAYO ROBSON (Leeds) read a paper on the Diagnosis and Treatment of Ruptured Intestine without External Wound, basing his remarks on six cases which had come under his own observation or under the care of his colleagues, Mr. Edward Atkinson and Mr. Ward. In two of the cases abdominal section and enterorraphy had been performed. After a detailed description of the cases, Mr. Robson remarked that in some cases of ruptured intestine the symptoms were so distinct as to be almost pathognomonic; that other instances of abdominal injury might present most of the signs of ruptured intestine, and yet recover, the shock being due to disturbance of the sympathetic nervous system, and the diminished liver dulness to distended intestine; that the usual symptoms might be entirely absent for a time, only becoming evident after some hours; and that a failure in diagnosis might occur from injury to other regions taking the attention from the abdomen. In discussing the diagnosis, Mr. Robson considered the symptoms and signs separately, and then collectively; remarking on the variability of the cause, the difference in the degree of shock, the usually rapid and feeble pulse, the constant presence of vomiting and of pain, and, later, the usual signs of peritonitis; but especially dwelling on the importance of altered liver dulness, which when normal is almost proof of absence of perforating wound of the alimentary canal, and when diminished is suspicious of perforation, but when absent is almost pathognomonic of rupture. He considered the combination of symptoms most to be relied on were shock, more or less severe, following immediately or within a short time on an accident, pain in the abdomen, moderately quick and soft pulse, vomiting of contents of stomach followed by bilious vomit, anxious countenance, and diminished or *absent* liver dulness. After showing that on expectant treatment no reliance could be placed, Mr. Robson remarked that the only hope of success lay in early operation, and consequently that a timely diagnosis was of vital importance, to attain which it would seem necessary that all cases of intra-abdominal injury should be both acurately observed and fully reported. For his own guidance he had adopted the following rule:—In cases where there is a reasonable belief that the intestine is wounded, as evidenced by the history, symptoms, and signs, exploration by a small median incision must be made, when, if there be any rupture of the bowel, flatus or serum tinged with blood or feculent material will escape through the small peritoneal opening, which can then be enlarged and necessary treatment adopted; but should no flatus or fluid appear and the peritoneum prove to be healthy, the small wound can be closed, and no harm will have been done.—Mr. GOLDING BIRD remarked on the diagnostic value of radiating pain as insisted on by Mr. Poland. Much liquid might result from the melting of ice sucked by the patient, and he had known the peritoneum to contain much blood-stained iced water; the liquid and solid food should be of the smallest quantity in the treatment of such cases. He inquired as to the interval between the taking of the last meal and the receipt of the injury, with a view to explaining the variations in the degree of shock.—Mr. BRYANT discussed the value of treating as serious all cases of abdominal injury; his dressers and house surgeons were scrupulously taught to take in and watch for at least twenty-four hours every case of abdominal injury. Mention was made of a case in a child where there appeared to be but a slight injury with mere local tenderness; two days after the injury vomiting and distension appeared, and the case proved fatal on the fifth day, when the necropsy showed that a slight rupture had led to the fatal peritonitis. Although Mr. Mayo Robson had had no recovery, yet he could not but praise the surgery adopted, and he admitted that even if rupture were probable the proper measure was to explore. In conclusion, he spoke admiringly of the papers on Abdominal Injury contributed by Mr. Poland to the Guy's Hospital Reports.—Sir WILLIAM MAC CORMAC thought the dictum right, "When in doubt operate," as in hernia, so in suspected rupture. But little importance could be attached to the symptom of shock.—Mr. BENNETT thought that even a week would not be too long to watch cases of abdominal injury. He related a most instructive case which occurred in a boy aged fifteen, who was struck in the loin with a cricket-ball, and had no symptom except slight tenderness there. The boy was kept in bed for a week on a spare diet by Mr. Pollock's directions, but then, seeming well, was allowed to get up; this was soon followed by faintness and death. The necropsy showed that the duodenum had been torn across, but the tear had not implicated the peritoneum till the fatal issue.—Mr. ROBSON, in reply, said that the radiating pain was present in the cases of direct injury, but not in those in which the traumatism was indirect violence. He was well aware of the dangers of sucking too large quantities of ice, and invariably starved such cases, even allowing rarely a pill of ice; tepid water enemata were used by him sometimes to relieve thirst. In all his cases the time at which food had been taken was probably long before the accident.

Mr. WILLIAM H. BENNETT brought forward a case of Intestinal Obstruction, in which the Colon gave way outside the Peritoneum. The patient was a gentleman advanced in age, who for many years had been habitually constipated. At frequent intervals he was in the habit of using violent purges, without which the bowels never acted. About the

middle of September, 1887, the constipation became more obstinate, and attacks of colic, from which the patient had also often suffered for years, were frequent and most severe. He was able, however, to obtain sufficient relief by means of his usual medicines up to Oct. 17th, when a very small hard motion was the only result of his treatment; the colic, which was very acute, did not completely subside. Gradually the abdomen became distended, and great discomfort ensued in consequence. Further purges were taken without any good effect, although there was a frequent urgent desire to defecate. On the 21st, whilst stooping over a letter, he felt a sudden acute pain passing down into the left loin. Some nausea and faintness followed, from which he soon rallied. He was seen by Mr. Bennett on the 22nd. His face was pinched and anxious in aspect. The tongue was brown and dry. The pulse very weak. The abdomen was much distended, especially on the left side, where the loin bulged very prominently. The rectum was empty, but a hard mass could be felt through its walls, situated in the bowel higher up. The distress from the distension was extreme, and the patient begged for an operation. As the case was clearly one of obstruction above the sigmoid flexure, a left lumbar colotomy was performed. On opening the abdominal cavity, there rushed out, before any gut was exposed, a large quantity of gas and some liquid fæces; on introducing the finger, the intestine could be felt in front of a space from which the gas &c. had come; manipulation of the colon, which could be easily made out, caused the air which remained in it to come through an opening in the gut at the lower part of the space mentioned, just below which could be felt a hard mass in the bowel. The distension at once subsided, but the patient became collapsed and did not rally. The case was regarded as a clear instance of rupture of the colon outside the peritoneum, which explained the mildness of the symptoms following immediately upon the giving way of the gut, which it was assumed took place when the acute pain mentioned in the account of the case suddenly seized the patient. In the same way, the one-sided character of the abdominal distension and the absence of peritonitis could be accounted for, and a curious corroboration afforded to a statement of the patient, to the effect that attempts at defecation only increased his distress, for it is easy to see how such attempts could force the contents of the colon more and more into the surrounding cellular tissue. The case was considered remarkable for its rarity, and on that account had been thought worthy of record.

Mr. W. J. WALSHAM read a case of Intestinal Obstruction treated by Nélaton's operation. There was a volvulus of the cæcum and malposition of the ascending colon. The patient, a man aged sixty-three, previously quite healthy, was seized suddenly with severe abdominal pain and vomiting, and the bowels, which were regular up to the time of the seizure, became obstinately confined. On his admission, two days later, into St. Bartholomew's Hospital, under the care of Dr. Gee, nothing could be found to account for the pain, either on palpation of the abdomen or rectal examination, save some slight fulness and tenderness in the right iliac region. Temperature, tongue, pulse, &c., were fairly normal. On Feb. 18th, 1887, two days after being in the hospital, he began to vomit continuously. On the 20th he seemed better, and the vomiting ceased, but the bowels remained obstinately confined. On the 24th stercoraceous vomiting set in, and he became collapsed. A consultation was held, but no diagnosis could be arrived at save that the obstruction was probably situated low down, though too high to admit of relief by right colotomy. As the patient's condition was such as to make it appear probable that he would die on the table were exploration of the abdomen attempted, the abdomen was opened in the middle line and a portion of inflamed and distended intestine—the portion which first presented—was secured by suture to the abdominal wall. Only a small quantity of fæces escaped. Though vomiting did not return, the abdomen continued swollen and tender, and the bowels remained unopened. He died on the afternoon of the 23rd. At the post-mortem examination a volvulus of the cæcum was discovered. There was general peritonitis, but neither extravasation of fæces or collection of fluid in the peritoneal cavity. It was found on tracing the gut backward that the colon beyond the splenic flexure, instead of passing across the abdomen to form the transverse arch, descended vertically to the left iliac fossa, and thence returned to the lower border of the stomach, forming a U-shaped bend. It then turned to the right, and, having reached the median line of the abdomen, again ran downwards to end in the cæcum, which was situated over the last lumbar vertebra almost in the middle line. There was no ascending colon in the right loin, and the cæcum was absent from the right iliac fossa. The gut that was opened proved to be the cæcum, which was situated at the apex of the volvulus. It was ulcerated in places, but owing to the surrounding adhesions, no fæces had escaped. Mr. Walsham remarked that the suddenness and acuteness of the symptoms pointed to some internal strangulation or volvulus, but after careful watching no definite diagnosis could be arrived at. Laparotomy was not undertaken because of the patient's collapsed condition, and Nélaton's operation, varied, however, by making an incision in the middle line, was accordingly performed. As it turned out by this operation, the cæcum, the apex of the volvulus, was secured to the wound, and subsequent untwisting of the gut prevented. Mr. Walsham, however, did not believe that the gut could in any case have become untwisted without surgical interference. Some surgeons hold that primary enterotomy is not to be advised, while others think highly of it as being less dangerous than exploration of the abdomen. In the present case enterotomy was performed, as likely to give the patient a better chance. Mr. Walsham thought that the consideration that like and similar conditions, though rare, are of occasional occurrence, should influence us to some slight extent in determining whether laparotomy or enterotomy should be performed, and, when taken in connexion with the other objections that have been raised by some surgeons, should, he thought, dispose us to reserve enterotomy as a primary operation merely for those desperate cases in which it appears that laparotomy must inevitably prove fatal.—Mr. BRYANT mentioned the case of a lady, aged seventy-three, who had suffered from attacks of colic and nausea, with difficulty in defecation, due to chronic intestinal obstruction of doubtful cause. A very acute exacerbation led to the performance of colotomy in the right loin, but the colon was found collapsed and empty. This discovery was followed by the performance of Nélaton's operation in the right groin, with immense relief to the patient, and from the artificial anus there began to issue, in snake-like forms, solid fæces, and this continued during three days and nights, much to the relief of the patient, who, however, being aged and feeble, died on the fifteenth day. Dr. Goodhart made an examination, and found that the cæcum was enormously distended, and half turned on itself, so that the vermiform appendix was directed upwards. This semi-volvulus was everywhere adherent, and the fæces had issued from the greatly dilated cæcal sac. Mr. Bryant also related cases in which Nélaton's operation had done good service in cases in which an exploration could not have been employed on account of the feebleness of the patients. Referring to Mr. Bennett's case, Mr. Bryant related that once, two years ago, whilst performing colotomy in the left loin for cancer of the sigmoid flexure, he found on reaching the retro-peritoneal space, before stitching the colon to the wound, an escape of fæcal gas, and on separating the parts so as to bring the colon to the surface an escape of fæces. The bowel was stitched to the edges of the wound, and the cavity from which the fæces and gas escaped drained. All went well, and on the third day the colon was opened. Most probably this case was the counterpart of Mr. Bennett's.—Mr. HOWARD MARSH contended that Nélaton's operation was not unscientific, and indeed was the only method of treating certain cases of obstruction in which the patient was too debilitated to sustain the weakening effects of a regular exploration. At St. Bartholomew's Hospital a case occurred some years ago, under the care of Mr. Morrant Baker, in which this operation was followed by a cure. He considered that greater importance should be attached to the increasing distension of the abdomen, as affording a sign for operation. He asked whether any tumour could be felt in Mr. Walsham's case.—Dr. HABERSHON related a case of cancer of the sigmoid flexure in which a somewhat similar arrangement of intestine existed like that of Mr. Walsham's case.—Mr. MAYO ROBSON asked Mr. Bennett whether any pus was found behind the colon, with the suggestion that an abscess might have burst into the colon. Nélaton's operation was devised before surgeons thought of exploring the peritoneum and bowels. He had seen the operation performed twice recently at the Leeds Infirmary, by Mr Jessop and Mr. McGill, with great comfort to the patients.—

Dr. BROADBENT (President) mentioned a case which had much perplexed him at the time. On an exploratory incision being made, the cæcum was found enormously distended, and surrounded with adherent coils of small intestines, evidently of some standing. The cæcum gave way during the operation, and the patient died in spite of every effort to save her.—Mr. BENNETT, in reply, said that Mr. Bryant's case was evidently very like his own. As to Mr. Robson's question, no pus was found, and the walls were quite unlike those of an abscess. Had it been so he would not have brought the case before the Society, as these cases were common enough.—Mr. WALSHAM, in reply, said he could not enlighten Dr. Habershon. In answer to Mr. Marsh, it was thought that some fulness was felt in the left iliac fossa, but nothing definite was made out. His case was an example of the value of early operative interference, which would probably have saved the patient.

The following living specimens were shown:—

Dr. PASTEUR: A Girl with Congenital Hypertrophy of the Left Lower Limb.

Dr. COLCOTT FOX: A boy, aged five, with a Hard Chancre on the Upper Lip and Swollen Testicle.

Mr. HOWARD MARSH: Successful case of Laparotomy for Tubercular Peritonitis.

Mr. BERNARD ROTH: Arrested Growth of Ulna from Exostosis.

Dr. W. H. WHITE: Floating Kidney.

MEDICAL SOCIETY OF LONDON.

Treatment of Acute Rheumatism.—Osteo-arthritis.

AN ordinary meeting of this Society was held on Feb. 13th, Dr. J. Hughlings Jackson, F.R.S., President, in the chair.

Dr. DONALD HOOD read an elaborate paper on the Treatment of Acute Rheumatism, with special reference to the use of the salicylates, based upon the reports of more than 2000 cases. Of these, 850 were from the records of Guy's Hospital before the introduction of salicylates; the remainder were all treated with salicylates from the time of admission into hospital, 515 of them being treated at St. Bartholomew's Hospital and 635 at Guy's. The cases chosen were all typical acute sthenic rheumatism, occurring in patients of both sexes under thirty-five years of age. Two marked results of administration of salicylates were a loss of joint pain and a fall in the temperature, but relapses were more common than under the older methods of treatment. The salicylates appeared to have no effect whatever in either reducing, preventing, or limiting the intensity of cardiac lesions. The formidable complication of hyperpyrexia was discussed and cases referred to illustrating the characteristic symptoms; it was as common among patients treated with salicylates as among those treated on general principles. It might occur even where the drug had been given regularly in full doses. For treatment, it was recommended to stop administration of the drug, to apply cold locally, and to give stimulants. His recent inquiries confirmed the opinion he expressed in 1881, that patients taking salicylates, though quickly losing their pain, were often left enfeebled, and remained in hospital longer than those who did not have the remedy. The mortality between the two sets of cases was much the same. For purposes of classification and treatment, he divided acute rheumatism into three large groups—that of the child, the adult, and the aged. In children, who had often severe cardiac lesion without much joint pain or pyrexia, there was little indication for rigid specific treatment, whether by alkalies or salicylates. It was in adults that the administration of salicylates would be found of most good. In the third group, cases occurring amongst people between thirty-five and fifty were rare, and often presented anomalous symptoms, some verging on gout, others truly rheumatic, and others, again, with nervous systems damaged by alcohol, from whom danger was to be feared from delirium and hyperpyrexia. In these anodynes were more useful. In conclusion, Dr. Hood believed that in cases of ordinary acute sthenic rheumatism salicylates might be given with advantage, and the advantage was greater and more permanent where they were exhibited in combination with alkalies; but when the attack was complicated with the severer forms of pulmonary or cardiac inflammation, under which circumstances there was usually a coincident mitigation or even absence of joint pain, he did not think there was the same indication for using the drug.—Dr. SAMUEL WEST said that in his experience hyperpyrexia was rare; and he thought the high percentage of cardiac affection in recent statistics was to a great extent due to increased care in diagnosis. Salicylates were not indicated in children who presented cardiac complications without joint affection.—Dr. WHIPHAM had found that when alkalies were given with salicylate relapses were rare. In several instances he had traced toxic effects to impure samples of the drug; these symptoms were dispelled by brandy.—Dr. DREWITT and Dr. A. GARROD remarked on the differences in quality of the drug.—Dr. ROUTH advocated the cold bath as a means of treating rheumatic hyperpyrexia.

A paper was read by Dr. SPENDER (Bath) on some hitherto undescribed symptoms in the early history of Osteo-arthritis, or the so-called Rheumatoid Arthritis. After alluding to the comparative uselessness of mere academic discussions concerning the etiology of this disease unless they had a practical issue, he stated that his aim was to identify osteo-arthritis in its earliest stage beyond the possibility of doubt or failure. It was only then that medical treatment had a chance of success, and yet so often was the disease confounded with gouty or common rheumatic arthritis that the opportunity for proper remedies was allowed to slip irrevocably by. The amount of clinical material in Bath available for study was unrivalled, and he now offered the result of an analysis of nearly a thousand cases. He had found that in a large proportion of the quicker forms of the disease there were one or more neural phenomena present, any of which connoted osteo-arthritis, and demonstrated that it could not be anything else. (1) Increased quickness and tension of the heart's action, the pulse ranging from 80 to 145, without any objective sign of cardiac disease, and without the slightest pyrexia. This might go on for years, and was practically uncontrollable by any known means. (2) Excessive pigmentation of the skin in various parts, chiefly the face and hands. The colour of this pigment varied from a swarthiness which called up associations of supra-renal melasma, to the varied hues of bronze, lemon, and orange. The form and size of the pigmentary patches were as different as possible, appearing sometimes as broad splashes of colour, sometimes as circles around the smaller joints, and not unfrequently as countless yellow specks or freckles. In the ultimate stage of helpless osteo-arthritis, the term "multiple xanthoma" was applied to a special and intense form of pigmentary disease, which denoted a fatal issue sooner or later. (3) Perspiration, more or less local and severe, intermittent, and usually an accompaniment of pain: allied to this vaso-motor disturbance were the neural symptoms of erysipelas, heat, stinging, and scalding. (4) Neuralgia of a special kind, due to a perverted innervation of a large nerve plexus or of a large area of nerve supply. The initial pain of osteo-arthritis began in the ball of the thumb or in the ulnar area of the wrist, and after that it would seem to affect a limb all round, so as not to be identified with any individual nerves. Under cover of a supposed sciatica a steady osteo-arthritic lesion might go on unrecognised, and an analogous process might occur in the upper limb. The cerebral nerves were often gravely affected. Short summaries of interesting cases were given. The paper concluded by suggesting that, in addition to the ordinary types of uncomplicated osteo-arthritis, there was a large and hitherto undescribed group, in which the pathology of joints was merely one sign of a profound nerve disorder. It was called conventionally an arthritis; but really the arthritis was only one neural symptom among many others, and possibly not the most important. Finally, an ideal case was described in which the special points of the proposed new osteo-arthritic group were observed, confirming and making sure the diagnosis.

NEUROLOGICAL SOCIETY OF LONDON.

THE general annual meeting of this Society took place at the Holborn Restaurant on the evening of February 2nd. The following office-bearers, nominated by the Council, were unanimously elected:—President: Sir J. Crichton Browne, M.D., F.R.S. Vice-President: J. Hutchinson, F.R.C.S., F.R.S.; Thomas Buzzard, M.D., F.R.C.P. Council: H. Charlton Bastian, M.D., F.R.S.; A. Hughes Bennett, M.D., F.R.C.P.; D. Ferrier, M.D., F.R.S.; J. Hughlings

Jackson, M.D., F.R.S.; G. J. Romanes, F.R.S.; G. H. Savage, M.D., F.R.C.P.; E. A. Schäfer, F.R.S.; James Sully, M.A.; D. Hack Tuke, M.D., F.R.C.P.; Samuel Wilks, M.D., F.R.S. Treasurer: J. S. Bristowe, M.D.. F.R.S. Honorary Secretaries: J. Anderson, M.D., F.R.C.P.; A. de Watteville, M.D., M.A., B.Sc.

After the business meeting the members of the Society dined together; Sir James Crichton Browne, President, in the chair. About forty members and a number of guests were present, and amongst the latter was the President of the Royal Society, Mr. Joseph Thomson (the African explorer), and Professor Mivart.

After the loyal toast, the CHAIRMAN, in proposing the toast of the evening, "The Neurological Society," said that division of labour, it seemed to him, was ever characteristic of advancing civilisation, and that localisation of function might be observed not less in the community than in the individual. In science, he ventured to think, as in industry, the same kind of division of labour was perpetually going on. It was no longer possible for any one man to emulate Solomon, and talk wisely of beasts and of fowl and of creeping things and of fishes, and to be as encyclopædic as Aristotle; and every student of science who would be a profitable student must now be content to toil diligently, after a comprehensive general training, of course, in some allotment of one of the fields into which the great domain of science had been broken up. Biology had been broken up into botany, zoology, anatomy, and physiology, and so forth; and medical science, which was a branch of applied biology, had been specialised to an extent which was almost a reproach, for they had been told that there was no organ in the human body, except the umbilicus, which had not a group of physicians exclusively devoted to the treatment of its diseases. Well, perhaps specialism had been carried a little too far, and they might in some instances have sacrificed breadth to insight, but specialism in medicine was to some extent inevitable. And he ventured to claim that the diseases of the nervous system, which were certainly very complex, very obscure, and very varied, which required to be investigated by special methods and special instruments, and which had constantly light thrown upon them by physiology on the one hand and psychology on the other, constituted a natural and real specialty in medicine which well might demand the undivided attention of a group of physicians, as well as the collateral assistance of other physicians, who, though not making nervous diseases their special study, are particularly interested in them. If nervous diseases constituted, as he claimed, a natural and a real specialty in medicine, they were entitled, he thought, to a Society of their own, in which those that studied them might meet and compare notes. It had thus come about that a few psychologists who had been accustomed to study mind in connexion with its anatomical substrata, a few ardent physiologists who had made a special and particular study of the functions of the nervous system, and a large number of physicians who were engaged in grappling with the disorders and diseases of that system, had found it convenient to band themselves together for mutual encouragement and support into the Neurological Society, the second anniversary of the birth of which they were met to celebrate that evening. Its roll of members was long and lengthened; its meetings had been well attended, and given rise to discussions of the most thorough, searching, and practical description; and not only had it reached to the enjoyment of solid food, but obtained the command of an organ of articulate speech, for the journal *Brain* had passed into their hands—a journal which, he ventured to say, had already obtained some scientific standing, not only in this country, but on the Continent and in America. He ventured to augur well for the future of the Neurological Society which they inaugurated, and he founded his favourable prognostications upon the knowledge of the stuff of which the members were made, and of the spirit which animated them, of the significance to the community of much of the work in which they were engaged, and of the high and abounding interest of some of the subjects which occupied their attention. With regard to the spirit which animated the members, he might say that it was one of sanguine expectation. Remarkable discoveries on the structure of the brain and nervous system had been made of recent years, striking advances had been achieved in their knowledge of nervous diseases, and those discoveries and those advances had stirred up a spirit of enterprise and of curiosity, which, if he might compare small things with great, he would compare to that spirit which moved in this country after the discovery of the New World, and which filled "the spacious times of great Elizabeth with sounds that echoed still." Neurologists had two hemispheres to explore, and the promise of rich treasures of discovery to those scientific adventurers who would embark on the voyage of research. He thought he might say that, stirred by those discoveries and advances that had been made, the members of the Neurological Society were now moved by fervid expectation and anticipation. He was well aware that such fervid anticipations were sometimes fallacious and disappointing, and perhaps some of them would recollect what Oliver Wendell Holmes had told them of his fervid anticipation when he was, as he thought, about to read the riddle of the universe. Having observed that when unconsciousness is consciously approached, as during the inhalation of an anæsthetic—when the mind is on the confines of two worlds,—there arise sublime and voluminous, but fugacious thoughts, and having satisfied himself that in these thoughts, if they could only be caught and transcribed, there lay enshrined the secret of the universe, he determined that by a supreme effort of the will he would catch and transcribe them; so, placing himself in his arm-chair, with pen, ink, and paper at hand, he inhaled the vapour of chloroform. As drowsiness stole over him and just as unconsciousness was impending, those sublime and marvellous thoughts arose, and by a vigorous effort he seized his pen and wrote, he knew not what, for before he had finished he fell back unconscious. When he awoke, with trembling anxiety he turned to the sheet of paper, on which he could read, in scrawling characters but quite legible, the secret of the universe written in the words: "A strong smell of turpentine pervades the whole." Now that anecdote, he thought, taught that mere fervid anticipations were not to be built upon, but neurologists had momentous discoveries already made to found on. Touching upon the significance to the general community of the work in which the Neurological Society is engaged, he would remind them that the present was a nervous age. The nervous temperament was in the ascendant. The burden of the world's work, which used formerly to be borne by muscle, had been transferred to nerve in devising, guiding, and superintending machinery. They must remember that the nervous element in our population was constantly being increased by the preservation of sickly lives, which they owed to modern sanitary science. Those epidemics which used to devastate the country carried off a number of those of the least nervous resistance, and now that these epidemics had been restricted in their ravages, a large number of persons of weakly nervous organisation and unstable equilibrium, who would formerly have been cut off, were allowed to grow up and to suffer from every variety of nervous disease. "Take," said Sir Crichton Browne, "infantile convulsions as an example. Within a period of twenty years the mortality fell from 26,000 to 22,000, and that notwithstanding an enormous increase in the population." Now, it was quite certain that under infantile convulsions there used to be classed a large number of maladies which were now recognised of a different nature. But, allowing for this, it was incontestable that a large number of infants, owing to improved methods of feeding and nursing, who would formerly have died of convulsions, were now reared to swell the nervous element in our population." The tide of nervous diseases thus rolled on, and that it did so might, he thought, be inferred from the fact that in the very same period in which the mortality from infantile convulsions diminished so notably the mortality from other nervous diseases rose from 30 to 49 per 1000 per annum. Nervous disease being the disease of the future, the Neurological Society might, he thought, render important services in safeguarding the public health. It had an important mission, and affecting the general community in connexion with mental and nervous hygiene. To bestow just one word on the lofty and absorbing interest of some of the questions which must be deliberated on from time to time by the Nurological Society, he would point out that those questions lay on the margin of that great unbridged gulf which separates the psychical from the physical, that unbridged gulf which was as alluring to the speculative philosopher as the lamp was to the moth. Not, perhaps, until the veil of life's temple was rent in twain would they rightly comprehend the incarnation of mind in matter, but it was a law of our being to press as closely as may be upon that great mystery, and to read with eager interest such fragments as were decipherable of the cryptic records of the brain.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Wednesday, Jan. 25th, W. Ross Jordan, President, in the chair.

An Undescribed Fallacy in Testing for Albumen in Urine with Nitric Acid.—Dr. CARTER drew attention to the importance of securing complete purity of nitric acid used for the purpose of testing for albumen in urine, and showed a specimen of acid which he had obtained from a druggist of good position, and which, evidently from the presence of some impurity, gave reactions which were undistinguishable from those of albumen. Subsequent analysis of the nitric acid had shown that it contained a trace of nitrate of silver.

Cardiac Thrombosis.—Dr. CARTER also showed a specimen of cardiac thrombosis taken from a lad of thirteen years of age, who about a fortnight previously had been attacked with sore throat of a low type. The lad was very emaciated, had been greatly neglected, and his surroundings had been unhealthy. A few days before his death he had been attacked with acute pneumonia, and was admitted into the Queen's Hospital in a state of collapse, and died shortly afterwards. On post-mortem examination adherent clots of various sizes were found in both ventricles, many of which had undergone central softening, and were beginning to break up. The greater part of the right lung was in a state of pneumonic consolidation, and presented two or three recent infarcts of considerable size. The left lung was congested, but free from consolidation and infarcts; the other organs were normal. Dr. Carter drew attention to the importance of the nutrition and vitality of the blood as a tissue of the body, as a factor of thrombosis, to which he was inclined to attach even greater pathological significance in these cases than to such conditions as alteration of the vascular walls and retardation of the blood current. He dwelt on the clinical circumstances under which thrombosis most frequently occurs in support of the view. He regarded the whole question as important from a practical and therapeutic standpoint.

Congenital Sacral Tumour.—Mr. WILLIAM THOMAS exhibited a child, aged eleven months, which had a large congenital sacral tumour. The tumour was of a mixed character, containing several cysts, much fatty tissue, and some firm cartilage-like masses continuous with, but movable on, the sacrum. No communication was evident between the tumour and the spinal canal. It projected downwards and backwards, its lower limit reaching the lower third of the thigh. The mother states that it was relatively as large at birth. Mr. Thomas intended keeping it under observation for a time, with a view to removal.

Abscess of Frontal Sinus.—Mr. LLOYD OWEN showed a case of chronic abscess of the frontal sinus, successfully treated by opening and free drainage.

Tubercular Necrosis of Cranial Bones.—Mr. BARLING showed a case of tubercular necrosis of the cranial bones causing perforation in a young girl.

MR. J. W. TAYLOR read a paper on the Use of Electricity in Gynæcology.

Reviews and Notices of Books.

Animal Magnetism. By ALFRED BINET and CHAS. FÉRÉ, Assistant Physician at the Salpêtrière. (Vol. LX. of the International Scientific Series.) London: Kegan Paul, Trench, and Co. 1887.

IT is happily seldom that we are compelled to give an earnest warning against a book. Most of the volumes which reach us are of a sufficiently technical character for them to be unattractive to the outside public. This series has, however, established a well-earned reputation, which has led to its introduction into the hands of any person, male or female, of semi-scientific tastes. Its red covers may be found upon most bookshelves, and this fact alone should have led to more strict supervision of the material of this latest volume. It is undoubtedly interesting, since it is based mainly upon personal observations made at the Salpêtrière in strict accordance with the methods inaugurated by M. Charcot; but it is worth bearing in mind that the feeling of the authors themselves is that, as regards "Animal Magnetism and Hypnotism," their researches do not justify general conclusions. They avoid even the appearance of completeness in their desire to assert nothing of which they are not assured, and to avoid quotation of experiments which they have not verified. With these avowed aims it is to be regretted that they should have attempted a historical survey of animal magnetism, since in rummaging into the past they have rescued from oblivion many details which had better have been left undisturbed. They have printed in full a secret report dealing with the dangers of magnetism with respect to morality, and in so doing they have gone far beyond the limits of prudence. Such a report might perhaps have appeared in a medical journal or in a strictly medical work, but it is distinctly out of place in the International Scientific Series, which, by many of its former volumes, has attracted the attention of the general public. It would, perhaps, be too severe to say that this series represents science made easy, but its work hitherto has certainly been to render science more interesting and more accessible to general readers, and many of the volumes, like the present one, have received such very popular titles that there can be little doubt of their reaching non-scientific circles. Of the bulk of the book there is, perhaps, little to be said at the present time. It deals with the modes of producing hypnosis, with the symptoms of hypnosis, with imperfect forms of hypnosis, and then passes to a general study of suggestion, hallucinations, and various movements, acts, and forms of paralysis, the result of suggestion. Of necessity, the chapter upon the application of hypnotism to therapeutics and education is rather vague and tentative, and the concluding chapter upon hypnotism and responsibility is mainly of interest in disclosing the attitude of mind in which the authors work. They say: "Some facts recently observed in Italy seem to indicate that the practice of hypnotism may produce in the subject permanent nervous affections. Yet to assert that experiments must therefore be prohibited would imply that there are truths which it is better not to know." In estimating the value of their results, it is also well to remember that they have been obtained (p. 187) by "choosing hysterical subjects who display the strongly marked characteristics of profound hypnotism," and that the authors add, "anyone who wishes to verify the new experiments in suggestion which we adduce must occupy himself solely with these subjects."

The Diseases of the Breast. By THOMAS BRYANT, F.R.C.S., M.Ch., Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital; Vice-President, Chairman of the Court of Examiners, and Hunterian Professor of Surgery, Royal College of Surgeons, England. London: Cassell and Co., Limited. 1887.

THIS book is one of Messrs. Cassell's series of clinical manuals. The subject of diseases of the breast is one that cannot fail to interest every surgeon; and anyone having the large experience which has fallen to Mr. Bryant's lot accumulates a considerable amount of clinical material for such a work as this, and has the advantage of writing almost exclusively of what he himself has seen, rather than drawing largely upon the experiences of others. The book before us is almost exclusively the outcome of Mr. Bryant's own clinical observation, and as such will be rightly valued by his readers. Mr. Bryant is so well known, both as an author and a surgeon, that we are absolved from the necessity of speaking fully or critically of his work. It shows the same characteristic features as his other books and shorter publications. The cases briefly related to illustrate the various features of mammary disease are numerous—if anything too numerous; and the thirteen wood engravings and eight chromo-lithographs add considerably to the value of the work. The facts stated in reference to carcinoma

and sarcoma of the breast support the view now generally advocated, that a large measure of success can be obtained by early and wide removal; but in operating for scirrhus Mr. Bryant does not advise excision of the axillary glands unless they are obviously diseased.

The Rectum and Anus: their Diseases and Treatment. By CHARLES B. BALL, M.Ch., F.R.C.S.I., Surgeon to Sir Patrick Dun's Hospital, University Examiner in Surgery. With 54 illustrations and 4 coloured plates. London: Cassell and Co. 1887.

THIS also is one of Messrs. Cassell's series of clinical manuals, and appears to us to be well calculated to increase the popularity of the series. It is essentially a clinical work, and the subjects are treated and dealt with in a clear, practical, and frank manner. Dr. Ball has two special qualifications for writing such a book as this. First of all, he is well versed in the literature of the subject, and has had considerable practical experience in the management of cases of rectal disease, so that, while he can refer widely to the published opinions of others, his book is not a mere "paste-and-scissors" compilation. And then, still further, he does not write to advocate any special views of his own, either in pathology or therapeutics. Thus we find the ligature, the cautery, and the crushing clamp spoken favourably of in the treatment of internal piles, and the merits of these rival methods are fairly discussed and impartially balanced. It is this which will make this manual a very useful book to other surgeons. We must also speak favourably of the way in which the cases mentioned are detailed; the histories are brief, pointed, and well told, and really illustrate the subjects discussed without encumbering the text. The illustrations are clear, and the coloured plates are an improvement upon some which have appeared in this series.

CREMATION AND BURIAL REFORM.

MR. FRED. W. LOWNDES read a paper at a recent meeting of the Liverpool Medical Institution on "Cremation or Burial: the Disposal of the Dead in and around Liverpool." He commenced by alluding to the circumstance of his having in 1874 read a paper in this same institution on the subject of Cremation, which had been then suggested by Sir Henry Thompson. In that paper he gave details of the disposal of the dead in Liverpool from its earliest history up to that date, and he left for discussion this question: "Is Cremation preferable to Burial?" While apologising for again bringing forward so gloomy a subject, he urged that the disposal of the dead was too important a subject to be ignored or treated with indifference by the members of a profession whose care was the health of the public, and he begged each member to accept and retain a copy of the *brochure* published by him in 1886, and noticed in THE LANCET of July 31st, 1886, p. 219. He first called attention to the fact noticed in the *brochure* (p. 15), that the burials in the intramural churchyards and cemetries reached the enormous number of 403,931, which would be much larger were it a complete total. This latter, Mr. Lowndes explained, was impossible to ascertain, as parish registers were not commenced in Liverpool until 1660. Another table was indicated, in which was shown the number of burials in eight suburban cemeteries, comprising 353 acres, within the period 1855 to 1886 (thirty-one years), which was 378,837. In other words, provision had to be made for the disposal of the bodies of the 14,000 who die annually within the city boundaries. Should this be by cremation or burial, or both? During the interval of fourteen years which has passed since this question was discussed before at the institution cremation had grown considerably in public favour. It had been conclusively established that it was not contrary to law; an adult human body could be reduced to ashes in the course of one hour without offence to anybody, the only remains being a pure white ash, which could be buried or retained. Facilities for cremation exist within convenient distance of London, and Mr. Lowndes predicted that similar conveniences would soon exist near London. He based this prediction (1) on the number of foreigners in this country to whom cremation was less a matter of sentiment than of nationality and religion; (2) on the large and increasing number of English men and women who would prefer that their bodies should be burned rather than buried. The only objection to cremation which he thought worthy of notice was the medico-legal one, but he observed that it was the quintessence of absurdity to say that of the bodies of the 14,000 who die annually in Liverpool not one should be cremated because it might have been a case of foul play. Deaths occurred daily of the perfectly natural character of which there could be no doubt, and, alluding to the Cork poisoning case, Mr. Lowndes expressed a very strong opinion that the body of the unfortunate Mrs. Cross ought neither to have been buried or her death registered without a previous inquest. He urged the improvement of our death registration system, the making of proper inquiries before burial or cremation, and the greatest caution in the giving of medical certificates of the cause of death, as more likely to detect and even prevent foul play than frivolous objections to cremation.

The author of the paper next remarked that the Roman Catholic Church had pronounced against cremation, and that this must greatly limit its sphere of action. Also that, even should cremation become more general, many would prefer burial for themselves and their friends. Hence the importance of ascertaining what reforms were needed as regarded burial in and near Liverpool. He noticed these under three headings: Firstly, that burial in the vaults of churches or other places of public worship should be absolutely forbidden. The names of local churches in which this horrible practice had occurred, even within recent years, were given; and it was insisted that all the vaults should be inspected by competent authority, the dead entombed so as to be harmless, and the vaults hermetically sealed. Secondly, that intramural burial should at once be restricted as much as possible, with a view to its being eventually forbidden altogether. Details were given of local churchyards and cemeteries within the city in which burials still took place, notwithstanding the fact of there being so many well-arranged suburban cemeteries within convenient distance. In one lay Henry Park, the pioneer of conservative surgery, who was one of the first to be laid there; and in the same cemetery had been buried many members of the medical profession, one of the last being the late Dr. Oxley. Thirdly, Mr. Lowndes urged the importance of burial reform in our suburban cemeteries. He alluded to the enormous number of dead buried therein, which in so short a period as thirty years had reached nearly the same number as had been previously interred in two centuries, and reminded the members present of the rapidity with which these cemeteries were being occupied with graves. He condemned wooden and stone coffins of all kinds, and recommended the earth-to-earth coffin or casket of the London Necropolis Company, a specimen of which he showed to the meeting. He pointed out the anomaly of the present system. Our cemeteries were so called because they were supposed to be "sleeping" or "resting places"; whereas the poor body, often boxed up in a strong coffin and placed in a vault or bricked grave, was made to enter into a most unseemly fight with Death and Nature and not to rest at all. He alluded to the sailor's "hammock" as making a most simple and yet admirable coffin, and the soldier's burial "with his martial cloak around him"; and concluded thus: "Every future burial should be conducted according to the motto of King's College, London, 'Sancte et sapienter.' It is always conducted holily with a religious service; let it be done wisely in accordance with sanitary laws."

COOKRIDGE CONVALESCENT HOSPITAL.—The nineteenth annual meeting was held on the 30th ult. The new hospital, founded by Mr. John North, will be opened in the spring. The number of patients admitted during the past year was 1290, or 18 less than the previous year; 892 were males, and 428 females. Of the 1189 who remained their full term, 551 were discharged cured, 296 much improved, 308 improved, 60 no better, 21 were worse, and 2 died. The financial position showed a balance of £321 6*s.* 1*d.* in the treasurer's hands. The career of the hospital has been one of uninterrupted usefulness and prosperity.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 18, 1888.

THE "Life of Darwin," apart from its biographical interest and great scientific value, is important as containing the opinions on many questions of a great thinker and unrivalled observer. The first volume contains the admirable autobiographical chapter originally written for the benefit of the naturalist's children, but now fortunately given to the world. It abounds in references to DARWIN'S father—for many years one of the leading medical practitioners of Shrewsbury,—whom his son frequently recalled as "the wisest man he had ever known," and the secrets of whose great professional success are indicated by one well qualified to speak. Dr. DARWIN was the son of the celebrated ERASMUS DARWIN, of whom it may be said that he would have been a great naturalist if he had been less of a poet, or a great poet if he had been less of a naturalist. The father of the future author of the "Origin of Species" was apparently an example of a phenomenon perhaps less rare than the commonplaces of philosophy would lead us to expect—viz., of a man achieving great distinction in a department of effort for which he has no natural bent, and to which he may even have a distinct antipathy. No doubt it is a safe rule for average minds to encourage them to follow their taste, since by so doing they are certainly most likely to do the best work of which they are capable. But such a principle has a much less direct application to men of distinguished talent, who are tolerably certain to achieve distinction in any work into which they can be induced to throw their energies. In their case taste and inclination are mainly important as affording the necessary stimulus to sustained labour. Although Dr. DARWIN became one of the most successful practitioners of his time, his son records that he actually "hated his profession." Perhaps the true reading of his mental habit would be to say that he hated certain departments of professional labour, especially anything that involved operating. We are told that to the end of his life he could not endure the sight of blood, and it is a significant instance of the transmission of a mental proclivity that in later years CHARLES DARWIN resigned his own medical career at Edinburgh because he could not accustom himself to attendance on operations.

The two characteristics which, we are told, contributed most to Dr. DARWIN'S success in life were his capacity of inspiring confidence, and his patience and fertility of resource in devising schemes for promoting the comfort of sufferers. We are not told the special means by which he gained the confidence of his patients, but it is not difficult to divine why this faculty should lie at the root of professional success. It is a sort of outward sign and visible index of other qualities of great value to the practitioner. The medical man cannot hope to inspire in others a confidence which he does not feel himself, and, if thoroughly sincere and self-respecting, he cannot possess such self-confidence unless he knows that his diagnosis and treatment are founded, not only upon adequate previous knowledge but also upon a conscientious study of the special case before him. In other words, in order to feel and inspire confidence of the right sort, the practitioner must be thoroughly grounded in his profession, and must throw his best energies into every case of which he takes charge. It is not difficult to foresee that a man who practises in this spirit is practically assured of success.

The second characteristic of Dr. DARWIN'S professional methods was never more worthy of imitation than at the present day. We are nothing now if not scientific; we aim at an exact diagnosis, and, as far as the materials at our disposal permit, at a rational and consistent treatment. We are too apt to forget that the patient thinks almost exclusively of his symptoms, and seeks their relief without that clear apprehension which we cultivate regarding the frequent worthlessness of symptomatic treatment towards promoting recovery. Again, in all chronic cases symptoms arise not directly associated with the special disease in hand, and the practitioner cannot afford to ignore the patient's natural desire for their investigation. Thus, the subject of valvular disease of the heart may be troubled with neuralgia, and he will not be consoled by being told that his pains have no connexion with his real malady, and that his most philosophic course will be to continue his mixture of iron and digitalis. Parallel instances might be multiplied without end. While we are far from asserting that the great body of practitioners ignore *relief* as compared with *cure*, we are certain that there is not unfrequently a tendency in this direction, and that this tendency is most apparent in hospital practice.

One curious and instructive story of Dr. DARWIN is worthy of reproduction. He was once called in consultation to see a serious case, which the regular attendant had pronounced hopeless; Dr. DARWIN saw the case, gave some hope of recovery, and went his way. The patient died, and Dr. DARWIN felt sure his reputation in that household was gone for ever. Not long afterwards, to his great surprise, he was again summoned to the same family, and found that gratitude and not resentment had been felt towards him for encouraging a hope which had nevertheless proved without solid foundation. He was accustomed thereafter to say that practitioners should be very slow to stifle hope, as such a course both paralyses effort and brings before its time the bitterness of death.

IN concluding our remarks, commenced last week, on Modern Criminal Poisoning, we have to refer to two remaining cases that come under this category—those, namely, of BERRY and LIPSKI.

The case of ELIZABETH BERRY, which was tried at Liverpool last year, marked a departure from the cases already mentioned, and presented several very interesting features. The poison she selected was one of the mineral acids, most probably sulphuric, which was kept in a surgery to which she, as nurse of the Oldham Workhouse, had access. No trace of the poison was ever found either during the life of the deceased or after death; and the only motive assigned was the paltry one of obtaining £10 as club money. Here, again, the prisoner's appearance was so much in her favour, her position and education were so superior to those even of workhouse nurses at the present day, that a strong feeling

was shown in her favour. Although the coroner's jury returned a verdict of "Wilful murder" against her, the magistrates dismissed the case on the ground that no jury would convict. Notwithstanding this, the case went to trial, and the only missing link in the chain of evidence was the failure to detect poison. To supply this deficiency the aid of photography had been sought, and this revealed marks on the face of the deceased girl which were clearly those of a corrosive poison. The post-mortem examination revealed appearances of corrosion in the œsophagus and stomach, added to which the symptoms which occurred on two separate occasions, with an interval of convalescence between, were those of a corrosive poison, at first diluted, then pure. These symptoms came on immediately after the prisoner and deceased had been left alone, first in the surgery and next in the bedroom. The prisoner's statements were found to be false, and, after a trial extending over four days before Mr. Justice HAWKINS, the prisoner was found guilty and sentenced to death. Strong efforts were made to obtain a reprieve, without avail, and the wretched woman was hanged. There was too much reason to fear that she had also poisoned her mother twelve months previously with atropia, a large quantity of which she was proved to have purchased.

The last case which remains to be noticed is that of LIPSKI the Jew, which attracted much attention at the time, and will still be remembered for the extraordinary character of its surroundings and the strenuous efforts which were made to obtain a commutation of the death sentence. The poison which he employed was nitric acid, which he poured down his victim's throat; but it was not generally known at the time that it was an almost unique preparation of the acid, which could have been obtained only from one vendor. This was the strongest piece of evidence against him. Another was that when the deceased and he were discovered, the door was locked on the inside and had to be burst open. It was at first supposed that his motive was revenge because the deceased would not yield to his amorous desires, but, as he subsequently stated in his confession, it was not for this, but to rob her of a sum of about thirty shillings.

Such are the more prominent cases of criminal poisoning which have been tried within the last six years. It will be admitted that they are sufficiently numerous to demand most serious attention, not only from medical jurists and general practitioners, but also from the State and the public at large. Although our death registration system is far from perfect, it practically compels criminals to call in the aid of a medical practitioner either before or immediately after death, so as to obtain a certificate of its cause. Every medical practitioner, therefore, should bear this in mind when called to a case which presents symptoms or appearances indicative of poisoning, or which cannot be reconciled with death from natural causes. The directions given in medico-legal works as to the duties of medical men in cases of poisoning are so exhaustive and elaborate as to discourage the attempt to master them. But the evidence given in all trials for poisoning shows that the most valuable evidence—indeed, that on which the case may depend—is what the medical attendant only can obtain. The conviction of a poisoner has often mainly depended upon such comparatively small matters as a bottle, phial, cup, pill-box, paper packet, vomited matters, urine, &c.; and if any difficulty should be experienced, the aid of the coroner's officer or police should be at once sought. Poisoners calculate largely on the opportunities which delay gives them, and on the favourable inference likely to be drawn from the fact of their having called in the medical attendant. Allusion has been made to the importance of paying strict attention to all cases of excessive vomiting and purging; a similar remark applies to cases of convulsions occurring in previously healthy persons. The diagnosis between the convulsions of strychnine poisoning and those of epilepsy presents no real difficulties to a careful observer; traumatic tetanus can be traced to its real cause, and idiopathic tetanus is so rare as to be seldom seen in this country.

It is time that something were done to put a stop to the sale of so deadly and dangerous a poison as strychnine in "vermin killers." It cannot be necessary to exterminate vermin by such deadly agents when other less dangerous means—such as traps—may be used. The sale of all poisons to the general public should be restricted to certain vendors duly licensed. We can hardly hope to stamp out poisoning by criminals, any more than accidental or suicidal poisoning; but we can at least make all three less easy of accomplishment.

In conclusion, it must be noted that the public are somewhat apt to complain through the daily press of the conviction of persons on merely circumstantial evidence. They overlook or ignore the fact that limitation to such evidence is inevitable in cases of poisoning. Of all the previously detailed cases, LAMSON'S was the only one in which the poison was administered by the accused in the presence of witnesses, and it was this which gave some colouring to the idea of LAMSON'S supposed insanity. Poisoning is of all forms of murder the most cowardly, the most cunning, the most difficult to prove. It is one, too, from which the victim has no means of protection; for the poisoner may be the most trusted servant, the most valued friend, the nearest and dearest relative, not even excepting the husband, wife, or parent. Poisoners, too, are also more hardened against conscience than other murderers; they have opportunities peculiarly their own, and it is rare for them to confess their crimes. It is satisfactory therefore to note that the female poisoners at Liverpool and Ashton did make confessions; the woman BERRY made what was practically an admission of her guilt, while LIPSKI and LAMSON made full confessions. These—the most convincing proofs of their guilt—should act as warnings for the future, and induce the lay press and the public to encourage, rather than discourage, those whose office it is to endeavour to bring these worst of criminals to justice—too often a most ill-paid and thankless duty.

THANKS to the combined results of the labours of clinical observers, pathologists and physiologists, the doctrine of cerebral localisation has, at least in respect to motor centres, come to be one of the most firmly established of physiological facts. The exactitude and precision with which the separate areas of the "psycho-motor" region of the cortex cerebri have been mapped out is indeed marvellous; and it is not surprising that attention should be now rather directed to a similar localisation of sensorial centres. Already a great deal has been gained respecting this far more complex and difficult

problem, and there is good hope that in time, by the aid of the same combination of methods of inquiry, our knowledge respecting these centres will be based on as firm a foundation as that of the motor area. Already there are many facts which go towards localising the cortical centres of vision, audition, and the tactile sense, the paths of which in the subcortical regions have been more or less established. Respecting the sense of vision there are many interesting facts at hand, of which the latest contribution from the clinical and pathological side is to be found in a paper by M. A. CHAUFFARD (*Rev. de Méd.*, Feb. 1888), dealing with sudden blindness from combined lesion of both occipital lobes.

The case upon which M. CHAUFFARD founds his paper was that of a man, seventy-four years of age, who was admitted into La Charité last July, two weeks after a slight but ordinary attack of right hemiplegia. In the middle of September, after a quiet night, the patient suddenly became totally blind. The eyes were staring; the pupils moderately large and sluggish; no palpebral reflex. There were no other symptoms, and during the day even a slight degree of vision returned; but the same night he was attacked with convulsions, became comatose, and died. At the post-mortem examination, in the left hemisphere there were found the ochry relics of previous hæmorrhage in two regions—viz., a small focus at the postero-external angle of the thalamus close to the occipital cornu of the lateral ventricle, and another just within the lobule of the insula in the region of the external capsule. In the right hemisphere there was a recent clot between the pia mater and arachnoid over the second occipital gyrus, concealing a small rent in the cortex, which led to a larger recent clot in the substance of the brain beneath the second and third occipital gyri and the posterior part of the third temporal. M. CHAUFFARD adds to this record an abstract of three other cases—one by BOUVERET and two by BERGER,—in which the symptom of amaurosis was found associated with more or less extensive destruction by softening of both occipital lobes; and he states that PFLÜGER has recorded a case in which gunshot wound of these lobes produced sudden blindness. Now it is admitted that simple cerebral hemianopsia, unassociated with any other sensory or motor symptom, corresponds to destruction of a certain region of the occipital lobe; so that if the left lobe be injured, the left half of each retina is rendered insensitive (homonymous hemianopsia). A bilateral lesion should then theoretically produce a double hemianopsia—i.e., total amaurosis. In the case recorded, the cortex was very slightly damaged, only a small area in the right occipital lobe being destroyed; but there was a very extensive subcortical lesion, and this may have interrupted the path of visual impressions, as the much more limited but deeper-seated lesion behind the left thalamus must also have done. Another interesting point is the separate localisation of the centres of visual perception and of visual memory. It is the former, which may be considered as localised in the occipital cortex, according to some in the first convolution only, according to others in the "cuneus" mainly; and others, again, consider that it extends over both these regions. Cortical amaurosis, then, of the type described in M. CHAUFFARD'S case would so far resemble peripheral amaurosis as to leave untouched the centre of visual memory, so that the patient might continue to dream and to have visual hallucinations. The borderland of psychology and physiology is touched in these distinctions, and we may pass them by at present. It may be noted, and M. CHAUFFARD candidly admits it, that in his case the left-sided lesion was of older date than that on the right side, so that the patient must have been hemiopic for some time without being conscious of it. Apart from such difficulties, such cases as this raise the whole question of cortical lesions inducing blindness, and exemplify also the grave prognostic significance of a symptom that indicates a bilateral lesion.

The clinical facts thus brought to light by M. CHAUFFARD are to a great extent supported by others and by physiological experiment. Thus Professor NOTHNAGEL, in a lucid discussion of this subject at the Wiesbaden Congress in 1887, declared that the centre for visual perception resides in the cuneus and the first occipital gyrus; that unilateral lesion of them causes hemianopsia, whilst bilateral produces complete amblyopia. He would apportion to the remainder of the occipital cortex the function of mental vision, whilst declaring that the precise area of this seat of visual memory is undetermined. The distinction thus drawn between the perceptive sensorial centre and the psychical is one which no doubt has a real and practical significance, and is of especial interest in relation to cases of aphasia, which depend not on motor disturbance (BROCA'S aphasia), nor on word-deafness (WERNICKE'S), but on word-blindness, as Professor NAUNYN, who followed Professor NOTHNAGEL in the debate at Wiesbaden, illustrated. What, however, is even of more importance is the fact that physiological research seems to be recognising in the occipital lobes a more intimate relation with vision than has been for the most part accorded them. FERRIER, it is well known, attributed to lesion of the angular gyrus the defects in vision which CHAUFFARD'S cases would localise in the occipital lobe; and hypothetically FERRIER has constructed a scheme whereby he illustrates the effect produced by destruction of one angular gyrus upon the vision of the opposite eye. The recent experiments of Professor SCHÄFER[1] do not bear out Professor FERRIER'S conclusions. Professor SCHÄFER destroyed in the monkey the angular gyrus first on one side, then on the other, without producing any disturbance at all of vision; and a subsequent experiment in which the lesion was carried to a greater depth resulted only in transient hemiopia. Professor FERRIER, on the other hand, by extirpation of one angular gyrus, obtained total blindness of the opposite eye and slight visual derangement on the same side as the lesion. Thus diametrically opposite conclusions are arrived at by these two physiologists operating on the same kind of animal, in extirpation of the occipital lobe. Professor SCHÄFER excised the whole of one occipital lobe by means of a vertical incision through the parieto-occipital fissure, leaving intact the angular gyrus. The result was a permanent bilateral homonymous hemianopsia. The bilateral removal of the occipital lobes (leaving the angular gyrus) produced total and permanent blindness. SCHÄFER thinks that the results obtained by Professors FERRIER and YEO in their experiments—

[1] On Special Sense Localisation in the Cortex Cerebri of the Monkey. Brain, Jan. 1888.

in which, after removal of these lobes, blindness did not occur until the angular gyri were also removed—may be explained by the method they adopted not being such as to ensure the total removal of the lobes. This is exemplified in another experiment in which the blindness was not complete, when it was found subsequently that the excision of the lobes had not been thorough, the lesion on the under surface of the brain not extending so far forwards as in the other and more successful experiment. No other lesion than this of entire extirpation of the occipital lobes was productive of total and permanent blindness, although temporary hemiopia, attributable to circulatory and other disturbance, sometimes followed lesions of neighbouring parts, as of the temporal lobe or angular gyrus, and it is of course quite possible that some of the fibres proceeding from the occipital lobe may enter these neighbouring regions. These experiments of Professor SCHÄFER harmonise better with clinical facts than most of the results hitherto arrived at by the physiologist; and they point to the possibility of the more accurate localisation of partial defects in the visual field than has yet been attained. In this regard we would especially direct attention to the careful deductions of Professor NOTHNAGEL, and also look for the accurate and precise record of clinical and anatomical facts in all cases of fatal cerebral disease in which such visual disorders are present.

IT is a difficult matter to obtain exact statistics with regard to so large a subject as the deterioration of the national physique, and we need not therefore be surprised to find that medical as well as public opinion is divided on this question. It is generally admitted that the townward movement of population, which is now universally apparent, is fraught with serious danger to health if it be allowed to pursue its course unaffected by other than trade considerations. It is allowed that the townsman's life lacks much that is wholesome in the habits and surroundings of the countryman. It is even tolerably certain that the want of these healthy conditions has in many cases effected an actual physical degeneration. The question at issue, however—namely, whether this degeneracy is more than proportionate to the normal wear and tear of civilised life, whether it is more or less general than in former periods of our history, and especially whether it is increasing in spite of the corrective efforts of sanitary science,—has not yet found a conclusive answer. The data afforded by examination of a limited number of army recruits under the short-service system, as in the paper contributed by Sir THOMAS CRAWFORD last August, are too special in their application to claim a national significance. Nor can we regard them as proving a marked declension in health even in the class of men with which they have to do. Recruits for the army are drawn from a variety of sources. While many no doubt can show an unexceptionable past, both in a physical and moral sense, many more as certainly have prior to enlistment suffered from want, and from the penalties of idleness or dissipation. They are also in many cases too young for military service, and their physical unfitness is merely another name for non-development. They cannot therefore be taken as accurately representing the working backbone of our population, and their condition, though significant in itself, cannot be taken as favouring the case for national deterioration. It is more than doubtful, indeed, whether this question is at present capable of solution, for another consideration has also to be taken into account. We have at hand at the present day almost too much material for statistical notation, but we do not find in the records of past investigation any satisfactory standard for comparison. Degeneracy was evidently not contemplated in former times, and the signs of its evolution, if they existed, have not been chronicled. It appears therefore too early to dread any marked declension in our bodily vigour as a people, and it is a hopeful sign of the times that several students of this subject regard it with an almost optimistic eye. Among these is Dr. LINDSAY of Belfast, who in a recent lecture denounced as quite irrational the existence of anything like national infirmity in an age distinguished by the vigour of its undertakings and the salutary advances of science. We would willingly agree with him in deprecating a despondent view of the national future, but we cannot, even in view of the activities manifested by many members of all classes, shut our eyes to the fact that there is in every city a large residual population, overcrowded, overwrought, underpaid, and underfed, which is only too prolific of its like, and which must be annually recruited, more or less, by rural immigrants in search of employment. To effect a circulation as free as possible in this residuum, to minimise its increase, and by every means to further in it, as throughout the country, the growth of healthy customs, and, we would add, the spread of healthy ideas, must be the resolute purpose of the patriotic sanitarian.

Annotations.

"Ne quid nimis."

THE UNIVERSITIES OF OXFORD AND CAMBRIDGE ON COLLEGIATE DEGREES.

FOLLOWING the example of the younger Universities, Oxford and Cambridge have decided to oppose the granting of degrees by the Royal Colleges of Physicians and Surgeons, so that, as we predicted some weeks ago, the University of London alone among Universities has allowed this power to be asked for without protest. The fear of a new Teaching University in London, which is unopposed by the Universities in general, has driven the Senate of the University of London into an isolated and false position. Convocation at Oxford by a large majority—ninety-eight to thirty-four—on Tuesday resolved to petition against the demand of the Royal Colleges as a breach of privilege towards the Universities, and because no due provision had been made by the Colleges to ensure that candidates should have received a sufficient preliminary education both in literature and science. Sir H. Acland in vain asked that the Royal Colleges should be trusted to secure a proper standard in culture and science. To a Convocation which still maintained that a degree in Arts was a necessary preliminary to a degree in Medicine, the second division of the College of Preceptors passed piecemeal seemed scarcely an adequate preparation for a Medical degree. The Cambridge petitioners, whilst desiring the power of degree granting to be limited to Universities only, urge reasons which are rather questions of policy than of educational interest, and this is the less to be wondered at when we remember that in order to popularise the Cambridge medical school the authorities have, by comparison with Oxford, step by step diminished the stringency of their entrance

examination and the length of their curriculum. They urge that the University of London is sufficient for London, and that the establishment of a second examining body in the metropolis, without any arrangement for University teaching, residence, or discipline, for the purpose of granting a degree on easier terms, would be objectionable. If this were a University combining all the Faculties, the objections of Cambridge would be untenable. Moreover, we question whether a longer course of medical study is required by all Universities than by the Royal Colleges as licensing corporations. Oxford, appealing to the interests of literature and science, has considered the question from a higher standpoint than the sister University. It is noteworthy that the names of Professors Humphry and Latham are missing from the Cambridge petition.

THE AGE FOR REVACCINATION.

THE Local Government Board have issued an Order dated February 3rd, 1888, modifying the one of February 18th, 1868, as to revaccination. The old Order limited the performance of revaccination by a public vaccinator to those who had attained the age of fifteen years and had not previously been revaccinated, except in the face of immediate danger from small-pox, when the limit might be reduced to twelve years. It has, however, become more and more evident of late years that even an efficient vaccination tends to lose much of its protective power before the age of puberty; and hence, as was foreshadowed by Mr. Ritchie in his recent speech at Sheffield, the age limit is now reduced to twelve years under ordinary circumstances, and to ten years in case there be any immediate danger of small-pox. The demand for revaccination at the public cost is not imperative upon the public vaccinator unless he is of opinion that the proposed operation is not for any sufficient medical reason undesirable; and he is further empowered to refuse it, provided he is unable to afford lymph for the purpose without interfering with the performance of primary vaccination in his district, the latter operation very properly taking precedence in point of importance as a protective against small-pox. The new Order also extends the meaning of the term public vaccinator to the medical officer of any workhouse, separate workhouse school, or workhouse infirmary, provided he performs vaccination under contract in any such institution. And, further, it also enables the public vaccinator to a workhouse to revaccinate children under his charge at any age below the ages specified in the Order, provided he records in his register the opinion that he deems their primary vaccination to have been inadequate.

BRITISH NURSES' ASSOCIATION.

As will be seen by a full report which appears in another column, a meeting in connexion with the British Nurses' Association was held on the 13th inst. at St. George's Hall, Langham-place. The large attendance of ladies and of influential members of the medical profession must have been sufficient to assure H.R.H. Princess Christian, who, as President of the Association, honoured the gathering with her presence, of the great and well-merited success the movement has attained. The draft of the bye-laws appears to have been well considered, especially No. 9, which runs as follows: "No scheme or measure shall be carried into effect, nor any new bye-law be confirmed, if it shall appear that such scheme, measure, or bye-law, when passed by a General Council meeting, was opposed by two-thirds of the medical men present at that meeting." We cannot too forcibly remind nurses that the active influence of the members of the medical profession is absolutely necessary, not only for the foundation, but also for the future well-being, of the Association. Dependent as nurses are upon medical men not only for their knowledge and training, but also for their future occupation, it is surely not too much to insist that in the hands of medical men shall rest a guiding and restraining influence upon the plans and deliberations of the General Council of the Association. The wording of the bye-law might perhaps be somewhat improved, so that no escape from this position would be possible. The presence on the platform of so many leading surgeons and physicians, and the warm sympathy expressed by them with the objects of the meeting, amply prove that the organisers of the Association will not lack the counsel and advice of the medical profession in the future conduct of the Association. In the proposed bye-law, No. 14, in which power is reserved to the Council to erase from the register the name of any associate for misconduct a wise discretion has been reserved. With regard to the Charter for which it is proposed to petition the Privy Council, we trust all details will be fully considered, and so arranged as to render any dissension between the nurses and the medical representatives in the Council impossible.

IRON IN PURPURA.

A CHEMICAL examination of the blood, bile, pleuritic effusion, brain, liver, spleen, marrow of the bones, kidney, lungs, and lymphatic glands in a case of purpura has been made by Dr. Zaleski, and published in the *Russian Military Medical Gazette*, his object being to determine whether this disease, which is called by him "morbus maculosus Werlhofii," is associated with any increase in the quantity of iron in the body, as some results obtained by Hindenlang and Kunkel appear to indicate. Dr. Zaleski found that, so far from this being the case, the iron was diminished by something like a half. He found no inorganic iron compounds like those described by Kunkel, but most of it existed in the form of an albuminate; some, however, was found in the pigment spots in very stable compounds similar to hæmoglobin. More iron appeared to exist in the gray than in the white substance of the brain.

BURIAL REFORM.

ALL who have seriously considered the disadvantages attending our present methods of interment will regard with satisfaction the efforts of the Church of England Burial Reform Association. We need only now select three of the specific reforms which the Society has set itself to accomplish in order to illustrate the orthodoxy of its views on this important problem in sanitation. These are (1) timely instead of delayed burial, (2) the use of readily perishable coffins, and (3) selection of a soil appropriate to the purpose of burial. The first of these desirable changes, we fear, has hitherto been somewhat overshadowed by the prominence in discussion assigned to the two latter. It is, nevertheless, itself an important matter, and particularly so, for obvious reasons, in cases of death from infectious disease. Thanks to the normal coolness of our climate, its claims to public notice have hitherto been less regarded than they well might have been. It is never too late for improvement, however, and we shall feel obliged to the Association if its efforts to encourage the early burial of the dead are instrumental in altering common usage in this particular. The pressing necessity for a general disuse of the solid wooden coffin, still so common, in favour of a light case, which will hardly impede the carrying out of the sanitary injunction, "earth to earth," we have insisted on in many former issues. On this point the Society need fear no scientific opposition, but only the dead weight of ignorant custom. The question of soil is a somewhat large one, connected as it is with those of the inclination of land, the course of streams, relative posi-

tion of dwellings, and other matters which are or ought to be considered in laying out ground for purposes of burial. The space at our disposal will not allow us to discuss it at length. We need only now refer to permeability, moderate dryness, and a general slope sufficient to ensure the gradual subsidence of water due to rainfall, as qualities necessarily associated with a suitable soil. We publish in another column an abstract of a paper on Burial Reform read by Mr. Lowndes at Liverpool, in which the urgent need of changes in the present method of burial is strongly enforced.

ARMY MEDICAL DEPARTMENT.

IN the memorandum which has just been issued respecting the War Office reorganisation, the following is the paragraph which relates to the Army Medical Service: "The Director-General of the Army Medical Department is charged with the administration of the medical services, Medical Staff Corps, and medical establishments of the Army, and the preparation of medical and statistical returns; with the supply of medical stores to the Army, and with the preparation of estimates for the above services. He will report on the above questions through the Adjutant-General, Quartermaster-General, or to the Military Secretary, according to the nature of the matter submitted." Under this regulation we presume that all questions relating to the *personnel* of the Department—appointments, promotions, retirements, rewards, and punishments,—will be submitted to the Commander-in-Chief through the Adjutant-General, and those relating to the *matériel* through the Quartermaster-General, on whom also will devolve the duty to "deal with sanitary questions relating to the Army." The contracts for the supply of medicines and instruments will be made by the Director of Contracts on the requisition of the Director-General, who will have a voice in determining upon the contract to be accepted. We do not know that these new rules will make any important change in the mode of conducting the service. It may possibly throw a little more power into the hands of the military as contrasted with the civil branch of the War Office; but if so, it will transfer with it a greater responsibility in the event of any shortcoming such as has been often complained of on active service.

SENTENCE OF BANISHMENT ON A DOCTOR.

A ST. PETERSBURG Court of Justice has just passed a sentence on a medical man which is sufficient to strike terror into the heart of every hospital medical officer in Russia. The circumstances, according to the *St. Petersburger Medicinische Wochenschrift*, are as follows:—In consequence of the insufficiency of room in the St. Petersburg hospitals for all the sick persons who apply, especially in winter, for admission, there is frequently great difficulty in obtaining a bed, even for an urgent case. In order in some measure to remedy this state of things, an "Information Office" was established some time ago for the benefit of patients. A medical man is on duty there all day, and he receives reports from all the hospitals regarding the number of vacant beds for each sex, and can thus send an applicant to a hospital where he has some chance of being admitted. No beds, washing accommodation, or clothes are provided at the office, but an applicant is allowed to remain there till nightfall waiting for news of a vacant bed. After that time he must leave. In the case above alluded to, the accused, Dr. Dreipelkher, who held the rank of "Court Councillor," was convicted of having sent a patient away from the Information Office, insufficiently clad and in very cold weather, without giving her any assistance, and so accelerating her death. The patient was an old woman in the last stage of phthisis, who was sent, as indeed she had been sent on previous occasions, to the Information Office by her employers in order that she might be admitted into a hospital. There was, however, not a single bed for a female in any of the hospitals. Dr. Dreipelkher sent an attendant with her to a police-station distant only a few hundred yards, with a request that she might be taken into a kind of small casual ward attached to the station for the night. The police, however, would not take her in because she "did not belong there." In like manner she was turned away from two other police stations, no clothing being provided for her, although the orders are that the feldsher (dresser) attached to each of the police casual wards shall in very severe weather see that no person is sent away without a warm wrap, a supply of which articles is kept for the purpose. After 6 o'clock the poor old woman became almost comatose, and was admitted to a temporary hospital, where she died about an hour afterwards. In what way Dr. Dreipelkher was to blame it would be hard to say. He was entirely without any accommodation for patients himself, and he seems to have done his best to provide for the poor creature until the next day, when he hoped he would be in a position to find her a bed in some hospital. He was, however, found guilty by the jury, and was sentenced to the deprivation of personal rights and to banishment for three years to the province of Archangel! This sentence appears to have been pronounced in obedience to some statute and against the judge's inclination, for he seems to have furthered a petition to the Czar through the Minister of Justice, praying for a commutation of the sentence to one month's imprisonment.

TOBACCO AMBLYOPIA.

THE optic nerve resembles a sensory tract of the spinal cord and consists of two parts, of which the central has a special affinity for tobacco, while drugs like quinine leave it unaffected. Tobacco is the essential agent in causing an axial neuritis which does not generally tend to spread to the nerve fibres coming from the periphery of the retina. As a rule, patients apply in the early stage of neuritis, and simple cessation of smoking is the only treatment required. When recovery is established, moderate smoking is not injurious. In addition to tobacco, a special condition is required to bring on an attack, alcohol, diabetes, excessive venery, starvation, mental shock, or distress being the most frequent auxiliaries. In some individuals a special tendency to degeneration (sclerosis or atrophy) exists hereditarily, and to these tobacco is especially injurious. Such are the conclusions of Mr. Edgar A. Browne's article in the *Liverpool Medico-Chirurgical Journal*, wherein also a table of cases appears.

POST-MORTEMS IN UNION INFIRMARIES.

THE Durham guardians are much exercised at the request of their medical officer for leave to examine the bodies of the deceased inmates of the workhouse, whose friends raise no objection to this procedure. The guardians were scandalised by such a proposal, and each vied with the other in the use of terms condemnatory of their medical officer. Moreover, having discovered that on some past occasion a post-mortem examination had been made without their sanction, they resolved to communicate this occurrence to the Local Government Board. It probably requires a properly constituted Poor-law mind to recognise this crime at its full enormity. For our own part, we hold that the medical officer who adds to his pathological knowledge by taking advantage of the means at his disposal is more likely to render service to the living than he who is unwilling to incur the trouble of examining the dead. The guardians of Durham, however, regard this desire to "cut poor people's flesh and bones after they are dead," as a

monstrous suggestion, unworthy of an Englishman, and calculated to deter poor people from seeking admission to the workhouse. We are sorry for the guardians, for the published account of their meeting exhibits their own condition of ignorance, and their inability to understand that the knowledge which their medical officer seeks to possess can only be acquired by these means.

PERIPHERAL NEURITIS.

A CASE presenting a series of interesting complications, and having important bearings on many questions of neural pathology, is recorded by M. Raymond in the "Transactions of the Société Médicale des Hôpitaux de Paris, No. 1.' The patient was a man aged fifty-seven, of alcoholic habits and a grinder of colours, who never suffered from any symptoms of lead-poisoning or syphilis, but the gums presented a lead line and the urine contained albumen. He developed paralysis of both legs, most marked in the extensor muscles of the great toe and in those of the front of the leg, with abolition of the tendinous reflexes and trophic disorders. Death occurred in uræmic coma, and the necropsy discovered diffuse nephritis, cerebral œdema, peripheral neuritis, superficial lepto-myelitis of the lumbar region of the cord, with inflammation of the roots of the nerves, especially the posterior, of primary interstitial nature, but leading secondarily to parenchymatous degeneration. The chief conclusion at which M. Raymond arrives is that medullary meningitis is the most frequent causal factor of peripheral neuritis, a position which certainly requires to be accepted with reserve until the point has received renewed examination.

FIRST AID TO THE WOUNDED.

A MEDICAL OFFICER of the French army has recently made a suggestion for the practical application of tattooing in connexion with the first aid to the wounded. His proposal is that every soldier should be tattooed with lines indelibly marking the course of the principal arteries, and with a star or cross at the points where pressure should be made with fingers or with an improvised tourniquet to check hæmorrhage from a wound. The soldiers would of course receive instruction similar to that given to ambulance classes as to the mode in which this should be applied and the other steps to be taken until the arrival of the surgeon. The idea is ingenious, but, we fear, impracticable. Only think of the labour involved in making anatomical diagrams in this manner in our own service on some 35,000 recruits who join the army annually, to say nothing of the objection which many of them would certainly make to being compelled to undergo the not very agreeable operation.

VOLUMETRIC ESTIMATION OF UREA.

IT is well known that when nitrous acid acts upon urea, both are completely decomposed into water, nitrogen, and carbonic acid; thus: $CO(NH_2)_2+2HNO_2=3H_2O+N_2+CO_2$. This reaction has been made use of in the volumetric estimation of urea by G. Campani, and has been described by him in the *Gazzetta Chimica Italiana*, vol. xvii. A tube of 200 cubic centimetres' capacity is fitted with a cork and delivery tube. Into this are placed twenty cubic centimetres of a 10 per cent. solution of potassium nitrite, then two cubic centimetres of urine, and lastly two cubic centimetres of 5 per cent. sulphuric acid. The contents are then gently warmed, and the carbonic acid evolved is passed through lime water of known strength. When the reaction is complete, the amount of lime neutralised by the carbonic acid is determined by titrating the solution with a centinormal solution of hydrochloric acid, using phenol phthalein as the indicator. The number of cubic centimetres of hydrochloric acid used by a given quantity of lime-water before the experiment *minus* the number of cubic centimetres used after the experiment multiplied by ·00022 gives the weight of the carbonic acid evolved from two cubic centimetres of urine. And as eleven of carbonic acid correspond to fifteen of urea, the percentage result is easily arrived at. Test experiments were fairly concordant with one another, and with those obtained by the mercury method of Liebig. The reaction should proceed slowly, otherwise nitrous acid is evolved. For most purposes just that amount of lime-water neutralised by forty cubic centimetres of the acid will suffice. It seems probable that this is more accurate than the hypo-bromite method, and it is certainly easy of execution.

TREATMENT OF STRANGULATED HERNIA.

DR. ZEINEMANN of Weimar has added to the list of cases in which the reduction of strangulated herniæ has been effected without operation by means of the plan proposed by Finkelstein—viz., the application of ether. One patient was a peasant woman of forty-five, who had an inguinal hernia on the right side. Without any evident cause this became strangulated. Taxis was tried without result. The patient's condition was very low. Dr. Zeinemann laid her on her back with the pelvis raised and the knees flexed, and poured ether over the region of the hernia, a tablespoonful at a time, having taken the precaution of applying oil over the vulva and anus to prevent the severe smarting which ether causes when it comes in contact with mucous membranes. In half an hour the tumour was perceptibly smaller, and a very gentle attempt at taxis was now sufficient to return the gut. The next morning the patient was perfectly well. Dr. Zeinemann recommends that in cases of strangulation much time should not be given up to manipulation, as the earlier ether is used the better. The main effect of the ether is, of course, to cool the hernia and its contents, the gaseous portion of them being in this way greatly diminished in volume. Besides this, the cold sets up active peristaltic action in the gut and renders it more movable. If so much time has elapsed before the commencement of this method of treatment that the muscular coat has become paralysed, there is less hope of a successful result. Still, the ether treatment may always be tried before resorting to operative measures, which, in spite of the immense improvement in their results by the introduction of antiseptic surgery, are by no means entirely free from danger.

INEBRIATES.

MR. HARRISON BRANTHWAITE, F.R.C.S.Ed., has published an interesting table of 50 cases of inebriety, excluding morphia cases, treated at the High Shot House Home for Inebriates, Twickenham, in two years and four months. The particulars are instructive. We can only give the summary of the facts. The patients were all male patients. The average age was 39·38. Of the 50, 30 were married, 18 single, and 2 widowers. As to education, 7 had college education, 24 good, 14 fairly good, and 5 elementary. Occupation: 9 were merchants, 7 army men, 4 clergy, and only 2 doctors. Heredity obtained in 19, or 38 per cent.; insanity in 6, or 12 per cent. There were 47 who smoked, and only 3 who did not smoke. Form of intemperance: In 45 it was regular, in 5 periodical. The duration of the cases had been on an average 9·84 years. Delirium tremens had occurred once in 12 cases, twice in 6, three times in 1, and four times in 1. The temperament was nervous in 36, sanguine in 13, and passionate in 1. Habits: Social 42, solitary 5, secret drinking 1, morose 1, and gloomy 1. Kind of liquor: All kinds 23, whisky 11, spirits 6, brandy 4, beer and whisky 3, brandy and whisky 1, wine 1, and beer 1. Cause: Company is assigned in 15, business worry in 7, domestic worry in 7,

&c. Complications: In 39 cases, none. The average time under treatment was 5·5 months. Subsequent history: Doing well 15, total abstainers 11, relapsed 9, still under treatment 7, unknown 7, and dead 1. Of the 50 cases, 23 were admitted as private, and 27 under the Act.

THE HOLBORN GUARDIANS AND THEIR MEDICAL OFFICERS.

IT is not always an easy question to decide when a patient is too far gone to admit of safe removal to a fever hospital. The Holborn Board of Guardians at a recent meeting expressed strong condemnation of one of their medical officers in regard to a case in which he advised the removal of a child to a hospital who died in the ambulance *en route*. An unfortunate mistake occurred by which the medical visit was not paid for twenty-four hours after the delivery of the order. The order was marked "urgent," but was not delivered directly to the medical officer, Mr. Hollis, but was placed on his desk. It was overlooked until the mother of the child went again, whereupon Mr. Hollis came and expressed the opinion that the child was not too ill for removal. Such a question should always be well considered, but infallibility cannot be expected even of the medical profession. At the same meeting of the board another medical officer, Mr. Marshall, was asked to resign because of the prevalence of fever among the school children. He was blamed for not having seen the children oftener. Over fifty cases had occurred. Of course the principal duty of the medical officer is to treat those who are ill. No doubt it is also a great part of his duty in times of epidemic to take such steps as shall isolate the sick and guard the well. But we should like to hear Mr. Marshall's side of the question before endorsing the action of the guardians.

THE PASTEUR TREATMENT IN BARCELONA.

THE municipal authorities of Barcelona, as we announced last year, have established a municipal micro-biological laboratory, mainly with the view of enabling persons bitten by rabid animals to obtain the advantages of Pasteur's method of treatment. To the post of director of the laboratory Dr. Jaime Ferrán, whose name is well known as having proposed and carried out a system of anti-cholera inoculations, was appointed, and he has been assisted by Drs. Pauli, Commenge, and Lluch. A report of the work done from May 10th to Dec. 10th, 1887, has just been published in *La Independencia Médica*. Altogether eighty-five persons have been subjected to the treatment. Of these, twenty-five had been bitten by animals that were certainly rabid, fifteen by those which had been pronounced rabid by medical men or veterinary surgeons, and thirty-seven by animals which were believed to be rabid, but whose condition could not be verified by professional men. The remaining eight persons had not been bitten at all, but submitted to the process in order to prove its harmlessness. The duration of the treatment was more than three months in forty-three of the cases, more than forty days in sixty-three, and less than that in twenty-two cases. Not a single case, either of those who had been bitten or of those who had not, proved fatal. The wounds were caused by seventy-two dogs, two cats, and two mules. Two of them were not bites, but dissection wounds with instruments tainted with the virus of rabies. At first Dr. Ferrán carried out the inoculations of his rabbits according to Pasteur's method—i.e., by trephining. Recently, however, he has adopted a new, and, as he believes, an improved, plan—viz., the injection of a single drop of the emulsion of the medulla containing the virus into the anterior chamber of the rabbit's eye. This produces exactly the same effects in about the same time as the trephining method.

MEMORIAL TO THE LATE SURGEON-MAJOR T. R. LEWIS.

THE subscribers to the above memorial will be glad to learn that the reprinting of Dr. Lewis's collected scientific works has now nearly approached completion, much delay having been occasioned by the reproduction of numerous maps and lithographs. The volume, in crown quarto, when completed, will contain about 800 pages, illustrated with five maps, twenty-four copperplate engravings, fifteen chromo-lithographs, and numerous woodcuts, with a portrait of the author in autotype, forming a fitting memorial of one who devoted his life to scientific medical research. It is hoped that intending subscribers will give in their names as soon as possible to the honorary secretaries, care of Messrs. Holt, Lawrie, and Co., 17, Whitehall-place, S.W., as it is especially wished that the names of all supporters of the memorial (each subscriber of £1 receiving a copy of the reprinted works) should appear in the list of subscribers, which will appear as an appendix to the volume.

FORCIBLE DILATATION IN HÆMORRHOIDS.

DR. DMITRIEFF has found that hæmorrhoids may sometimes be cured by forcible dilatation of the anus. In one case, where a young man suffered from violent hæmorrhage after every stool, and where there were large external hæmorrhoids and varicose veins in the inside of the gut, together with constriction at the anus itself, this treatment proved very successful. The patient was anæsthetised and a Sims' speculum slowly introduced into the right side of the anus, then a similar instrument was introduced into the left side, lateral dilatation being thus produced. Subsequently the two specula were again introduced into the anterior and posterior halves of the rectum, dilating the anus in an antero-posterior direction. Some small fissures of the mucous membrane were produced by the operation. Next day the external hæmorrhoids were found to be smaller and seemed to be shrivelling up; the internal ones were quiescent. Subsequently the former became smaller and smaller, and finally disappeared. There was no paralysis of the sphincter. In another case, where there were both internal and external hæmorrhoids, causing slight pain and hæmorrhage, and where there was no contraction of the anus, treatment similar to that described above was carried out, but the success obtained was only partial. The hæmorrhoids shrank to half their original size, but did not further decrease.

THE CASE OF MR. McNEILL.

FROM a perusal of Mr. Fletcher's communication in another column our readers will be in possession of the facts of the above case complete and in their order of occurrence. Beyond the testimony of the French official doctor that the wounds on the unfortunate deceased were neither self-inflicted nor the consequences of accidental injury, there are a number of circumstances which lead to the conclusion that a murder was committed. The equivocal wording of Mr. McNeill's telegram with regard to his head having gone wrong has received a satisfactory explanation, so that it can no longer be supposed that the deceased contemplated suicide; and there is abundant evidence to show that his health, although not of the best, was not likely to break down in sudden disaster. His having insured his life, made a will, and taken other precautionary steps, must be considered rather as facts suggested by a prudent foresight than as indications of mental obliquity. His Excellency the French Minister for Foreign Affairs, in an official report, adopts the theory of personal violence at the hands of another. The vacillating and wholly inefficient way in which

the investigation has been carried out by the French criminal investigation department has been the occasion, very naturally, of serious complaint. Not only does the law not allow what we term the "Queen's evidence" of an accomplice under promise of immunity from punishment, but no reward was offered by the Government, and it was with difficulty that one made by the friends of Mrs. McNeill received official sanction. Is it from sheer parsimony that our neighbours withhold a powerful means of detecting crime; or do they fear that the offer would be putting a premium on mendacity and perjury, and as a temptation which their subjects would not have the moral force to resist?

DISTRIBUTION OF LEAD IN THE BRAIN.

AN instructive chemical research into the distribution of lead in the brains of two lead factory operatives dying suddenly is the subject of a contribution to the *Journal of Mental Science*, No. 144, by Mr. Wynter Blyth. Presuming that the whole of the cerebrum was contaminated with lead in the same proportion as in that portion made the subject of investigation, and that the cerebrum weighed 1097 grammes, then the total weight in the whole cerebrum of lead sulphate would be 99·7 milligrammes, which, added to the 17·4 found in the cerebellum, pons, and medulla, makes a possible total of 117·1 milligrammes. It may be significant that the cerebellum contains more lead relatively than the cerebrum, the cerebellum yielding 1·07 per 10,000 parts, and the cerebrum ·92. Mr. Blyth's views on the nature of lead-poisoning are metaphorically represented by likening plumbism to some very refined method of vivisection by which an operator is able to destroy, not nerve centres, but thousands of the ultimate parts of nerve centres. Such a view is merely regarding the so-called "elective" influence of lead from another and slightly different aspect.

FEVER IN LONDON.

DURING the week ending Feb. 10th there were admitted into the hospitals of the Metropolitan Asylums Board 135 cases of scarlet fever, 14 of enteric fever, and 3 of small-pox, the latter being received from the parishes of Greenwich, Poplar, and Camberwell. At the end of the week there were 1695 patients under treatment in these institutions, of whom 1520 were suffering from scarlet fever, 154 from enteric fever, 2 from typhus fever, 9 from other diseases of a febrile character, and 10 from small-pox. The Managers have informed the Metropolitan Board of Works that the full extent of their monetary needs in regard to the exercise of their borrowing powers was £50,000 for the present financial year, and the same amount for the year following.

WILLIAM HYDE WOLLASTON, M.D., F.R.S.

The Electrical Engineer has recently presented its readers with a very handsome engraved portrait of Dr. Wollaston, which forms a fitting commencement to a series of portraits of eminent electricians of the present century which our contemporary has put in hand. The engraving is copied from a painting by J. Jackson, R.A., and fittingly commemorates a man in every way worthy to be remembered. Born shortly after the middle of the last century, young Wollaston was led by scientific proclivities to devote himself at Cambridge to the study of medicine, and although he later on abandoned the practice of the healing art for physical research, his genius and his achievements must ever remain prized and treasured ornaments of the profession. The sciences of chemistry and optics are those which are most largely indebted to Wollaston's labours, but electricity and magnetism received no small advancement at his hands. Such versatility and range of intellectual scope, rare at any time, have become rarer and far more difficult of achievement since his day, for the subject matter of the sciences has in the interval been enormously increased. But making all allowance for changed conditions, the example of such breadth as Wollaston's is still a useful stimulus, and the more so that the affectation of omniscience never had less chance than now of imposing upon men's good opinion, and the danger of overdoing specialisation was never more real or more serious than to-day.

LEICESTER SELF-COMPLACENCY.

THE *Leicester Post* contains a series of communications by Mr. J. T. Biggs, on Sanitary Progress in Leicester, the purport of which can be guessed. We had hoped to see a little more breadth in Mr. Biggs's writing of sanitary history; but, like most men of one idea, he sticks to it. The least creditable part of his history is an attempt to extol Dr. Johnston at the cost of the present medical officer of health, though they are both in the same condemnation of being revaccinated up to the hilt. Mr. Biggs exalts fresh air, pure water, and sanitary measures. It would be strange, indeed, if he did not. He says, in effect, "What fine fellows we are in Leicester"; but as disparagers of vaccination, and having an exceptional death-rate from infantile diarrhœa, they do not appear to the same advantage to others as to themselves.

> "O wad some power the giftie gie us,
> To see oursels as ithers see us."

THE DONDERS MEMORIAL FUND.

AN influential joint committee has been organised by the London Ophthalmological and Physiological Societies, with the view of co-operating with the committee formed in the Netherlands to celebrate the seventieth birthday of the eminent Professor of Utrecht, on the 27th of May next. On that date the law requires Dr. Donders' resignation as Professor at the University and Director of the Physiological Laboratory. It is therefore proposed on that occasion to connect his name in a permanent way with the spot where he has lived and worked for more than forty years, by a fund devoted to any scientific purpose he may select, to be called the "Donders Memorial Fund." The London committee feel that his numerous friends and admirers in this country will avail themselves of this opportunity to honour one who has contributed so largely to the advance of biological science and ophthalmology, and appeal for contributions, rather for the purpose of paying a tribute than of collecting any large sum of money; and suggest that the amounts contributed should not be specified, but amalgamated into a common sum for transmission to the Dutch committee, with the names of the contributors inscribed in a suitable form, for presentation to Professor Donders. Subscriptions may be sent to either of the Secretaries—namely, Professor G. F. Yeo (Secretary of the Physiological Society), King's College, London, W.C.; or Dr. W. A. Brailey (Secretary of the Ophthalmological Society), 11, Old Burlington-street, London, W.

DIPHTHERIA AT EPPING.

THE outbreak of diphtheria at Epping having assumed considerable proportions, and there being no evidence that its causes were being successfully met, Dr. Bruce Low of the Local Government Board has been commissioned to investigate its circumstances and to report upon them. So far, there seem grounds for believing that the disease, which has been very fatal, is not due to any ordinary sanitary defects. There has also been a spread of the outbreak into Walthamstow and Edmonton.

THE CROWN PRINCE.

THE statement of Sir Morell Mackenzie on the nature of the Crown Prince's affection, together with Professor Virchow's report on the microscopical examination of a slough detached from the larynx, both of which contributions will be found in another column, will not do much to allay the anxiety universally felt for the distinguished patient. Sir Morell Mackenzie's statement amounts to this, that he sees no absolute proof that the disease is malignant or cancerous in nature. What all Europe is anxious to know is whether Sir Morell Mackenzie and the eminent German doctors associated with him can find proof that the disease is certainly not cancer, and this knowledge appears, for the present at least, to be unattainable. One of the most painful circumstances in the case has been the uncertainty as to the diagnosis ever since May last. And now, after nine months, the same uncertainty continues. We would gladly, if we could, read Sir Morell Mackenzie's statement in another sense; but it is very precise and clear, and it is impossible to find in it anything that implies that in his opinion the disease is certainly not cancer. The only consolation to be derived from this latest report is the very small one that the opinion is, at any rate, less unfavourable than if it had been a confirmation of the diagnosis of cancer. Professor Virchow's report is purely negative, and the material submitted to him was evidently incapable of throwing any light upon the nature of the disease.

THE UNIVERSITY OF DURHAM AND THE GENERAL MEDICAL COUNCIL.

DR. PYLE, as the representative of the University of Durham on the General Medical Council, is to be succeeded by Mr. George Yeoman Heath, whose appointment has been notified. The University of Durham is to be congratulated on this appointment as well as the Medical Council. Mr. Heath has been long known as one of the most eminent authorities in surgery and in medical education in the north of England, and the claims of provincial degrees will have an able advocate in him.

LORETTA'S OPERATION ON THE STOMACH.

SOME two months ago, Mr. Treves performed this operation at the London Hospital upon a man suffering from fibrous stricture of the pylorus. At the time of the operation the man was very much reduced by pain and constant vomiting, and had been for some time unable to take food by the mouth. The abdomen and stomach were opened, and through the incision made in the viscus the pylorus was dilated by the fingers. The man made a rapid recovery, and has not vomited since the operation. He can now take any food well. The case will be shown at the next meeting of the Clinical Society.

THE NEW SALFORD HOSPITAL.

THE agitation against the new hospital for infectious diseases at Salford continues. One newspaper publishes a diagram, which curiously shows that a site which is held to be so dangerous is permitted to be used as a building area for permanent residence. It seems a pity, if the site be so bad as to constitute a "nuisance," that this cannot be prevented, for evidence of its unwholesomeness would doubtless be forthcoming from the residents.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign eminent medical and scientific men are announced:—Dr. Heinrich Bohn, Professor of the Diseases of Children at Königsberg.—Dr. Hugo Pramberger, *docent* in Medicine in the University of Prague.

ROYAL COLLEGE OF SURGEONS.

WE understand the Committee of the Association of Fellows of the Royal College of Surgeons are about to send to the Lord President of the Privy Council a letter criticising the Reply of the Council of the College to the Statement of the Association of Fellows (*vide* THE LANCET, Feb. 4th, p. 242).

ANTIPYRIN FOR SEA-SICKNESS.

THE public attention given to the latest remedy for sea-sickness and many other affections to which flesh is heir has its percentage of evil as well as good. Every medicament is not an unmixed advantage, and to suppose that antipyrin may be taken recklessly any more than chloral is to adopt a position of a dangerous kind. Antipyrin has on several occasions been administered with unexpected results. It is a drug which has undoubtedly powerful effects on the nervous system, especially as tending to produce a lowering action. We must strongly protest against its indiscriminate employment without the supervision of a medical man.

SHEFFIELD SMALL-POX HOSPITAL.

THE new Small-pox Hospital for Sheffield has now been completed. It is situated at Redmires, and has accommodation for 100 patients. All solid refuse is to be dealt with by means of a destructor, and an attempt at disinfection of the liquid refuse is to be made by some automatic contrivance, before disposal on land is carried out. The total cost of the hospital is about £13,150, and there are now 235 beds in all available for infectious diseases at Sheffield.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—It is rumoured that Professor Ewald will be offered Professor Senator's post at the Augusta Hospital.

Buda-Pesth.—Dr. J. Erlöss has qualified as *privat docent* in Children's Diseases, and Dr. J. Ottava as *privat docent* in Ophthalmology.

Dorpat.—Dr. Ernest Stadelmann, *privat docent* in Heidelberg, has been offered the post of Official *Docent* (which corresponds to the position of Extraordinary Professor) in Clinical Medicine.

Vienna.—The chair of Anatomy, vacant by the death of Professor v. Langer, has been offered to Professor His of Leipsic.

THE hospitals under the tutelage of the Knights of St. John reached last year the number of forty, and had under medical care a total of 7997 patients, representing 342,117 days' treatment in all. Of these cases, 5319 were males, 2034 females, and 644 children of both sexes. Under the category of "discharged cured" were 5946; "relieved," 659; while 658 died, and 824 at the close of the year remained in hospital. The infirmary in Heiligenbeil was opened for the first time in 1887.

WE learn that it is the intention of the members of the West Herts Medical Association to invite Dr. C. E. Saunders, the medical officer of health of the combined sanitary districts of Middlesex and Hertfordshire, to a dinner, on his retiring from that official employment, as a mark of respect and regard, and as an acknowledgment of the efficient manner in which he has performed his duties for a period of fourteen years.

STOMATITIS of a severe type prevails in Palermo. It first appeared in the great Lunatic Asylum, and then, extending gradually over the city, assumed epidemic proportions. Sanitary works were in progress at the time of the outbreak.

THE Consiglio degli Istituti Ospitalieri of Milan has just laid the foundation stone of a hospital for the chronic or incurable cases which come from the Spedale Maggiore. The new building, for which a site has been found at Cernusco sul Naviglio, is an amplification of a similar establishment erected there last year.

LEIPSIC is at last to have the Children's Hospital, so much wanted and so long projected. A convenient site has been obtained, and the funds are being raised by voluntary contributions. The buildings will, it is said, embody the most approved innovations in sanitary architecture.

A MEETING of delegates from the London medical schools is summoned for the 22nd inst. at the Middlesex Hospital, to consider the petition and Draft Charter submitted to the Privy Council by University and King's Colleges.

A BILL has been introduced into Parliament by Mr. Baird, Mr. Caldwell, and Mr. Mason, for establishing in the east end of Glasgow a College in connexion with the University.

Pharmacology and Therapeutics.

ACETO-TARTRATE OF ALUMINIUM.

M. ATHENSTAEDT has described in a French pharmaceutical journal a new salt, the aceto-tartrate of aluminium, which is a powerful antiseptic, and which has the advantage over many antiseptics of being non-poisonous. The author considers that it is an improvement on acetate of aluminium, as the latter is apt to decompose by exposure to the air, forming a subacetate which is insoluble in water. The double salt is easily prepared. It crystallises in needles; it is soluble in its own weight of water. When a small quantity of water is added to it a gelatinous-looking mass is formed. Its taste is not unpleasant.

BENZOL IN WHOOPING-COUGH.

Mr. Charles Macalister has tried the effects of benzol on a great number of cases of whooping-cough, some being in the stage of full development and a few on the decline. In many the benzol appeared to be effective, lessening the frequency of the paroxysms, rendering them less distressing, and also, perhaps, hastening recovery. Benzol is insoluble in water, and will not mix with it even with the aid of mucilage; but if a little rectified spirit (in which it is freely soluble) be added to a thin mucilage, together with some syrup and a few minims of compound tincture of chloroform, an excellent mixture is made.

GALVANISM IN INSANITY.

Dr. Joseph Wiglesworth, in an article on this subject published in the *Journal of Mental Science*, No. 33, concludes that whilst the use of galvanism to the head is a proceeding which is certainly not likely to revolutionise the treatment of insanity, this agent is nevertheless one that may do much good in selected cases, and even now and again we may cure cases which would otherwise drift into hopeless chronicity. The class of cases that offers the best field for the employment of this agent is that which includes examples of mental stupor and torpor: melancholia, attonita, and acute dementia.

GALVANO-CAUTERY.

In a paper read at the French Academy, M. Danion pleads for the employment of slight galvano-cauterisation as against the use of currents of a high degree of intensity, which often determine congestion and sometimes inflammation.

ANTIPYRIN IN NOCTURNAL EMISSIONS.

Dr. Thör of Bucharest finds antipyrin an excellent substitute for bromide of potassium in nocturnal emissions, being free from the objection to which bromide is liable—viz. that of producing acne. He prescribes from seven and a half to fifteen grains in the form of tablets just before going to bed. Again, in cases of the so-called sexual neurasthenia of Beard, the same drug has proved very useful, but larger doses are required. Dr. Thör commences with fifteen grains per diem, and gradually increases this to thirty grains.

ANTIPYRIN IN RHEUMATIC CHOREA.

A male child eight years old suffered from scarlatina followed by rheumatic arthritis and by chorea. Ten days after the onset of the latter Dr. Boussi ordered thirty grains of antipyrin, divided into four doses (in syrup), in the twenty-four hours, and this was repeated the next day but one, with immediately good results.

CHLORIDE OF METHYL.

That local anæsthesia by cooling the skin with a spray of chloride of methyl is of value in sciatica has been confirmed by M. Vidal. M. Besnier has employed it to prevent the pain from scarifying lupus. The skin should be blanched before complete anæsthesia sets in. Neuralgia, intestinal and gastric pains, hepatic colic, lead colic, pleuritic stitches, uterine pains, and those from chronic gout, are said to be amenable to its employment.

THE CASE OF
HIS IMPERIAL HIGHNESS THE CROWN PRINCE OF GERMANY.

BY SIR MORELL MACKENZIE.

His Imperial Highness the Crown Prince of Germany having expressed his wish that I should now place on record my opinion of his case, the opportunity is afforded of correcting some of the statements which from time to time have been inaccurately attributed to me.

The general idea is that I am of opinion that the disease from which His Imperial Highness is suffering is not cancer;[1] the view, on the other hand, which I have consistently maintained, is that there never has been any proof of the existence of cancer. To enter more into detail: When I arrived in Berlin last May I stated to my colleagues that, in my opinion, the appearances seen in the throat were of a negative character—that is to say, that the disease might be either benign or malignant, and that its nature could only be determined by microscopical examination. A portion of the diseased tissue having been taken away by me from the throat of His Imperial Highness, it was submitted to Professor Virchow, who could not detect in it anything of a malignant nature. Repeated examinations by Professor Virchow of other portions removed by me yielded similar results.

In the month of July, whilst His Imperial Highness was staying in the Isle of Wight, I pointed out to more than one of his august relatives that the danger that I most dreaded was the occurrence of perichondritis at a future date, and three months later this fear was proved to be well grounded. At the end of October and early part of November entirely fresh symptoms appeared, and at that time the local disease presented an appearance which was consistent with the diagnosis of cancer. It was then impossible to obtain any fresh microscopical evidence in the matter, and I considered it safer accordingly to treat the case as one of a malignant nature. At the same time, however, I drew up and submitted to my colleagues a protocol, in which I stated that although the disease at that moment looked like cancer, I could not agree that the malady was proved to be malignant until a further microscopical examination had been made. The document in which I set forth my views was forwarded to Berlin to be placed in the State Archives. Although the unfavourable symptoms then present were explicable on the ground of the existence of cancer, yet it was clear to the majority of the physicians at that time in attendance that perichondritis had supervened.

In the middle of December, however, the unfavourable

[1] In this statement the word "cancer," "cancerous," and "malignant" are used synonymously.

signs had passed away, and there were no longer any clinical symptoms of cancer. Microscopical evidence on the subject was, however, still wanting. This was furnished at the end of January, when a slough was expectorated from the very spot which had presented such a highly suspicious appearance in November. This slough was most carefully and repeatedly examined by Professor Virchow, and the result (which is now published) again shows that cancer could not be detected.

To recapitulate. In my opinion, the clinical symptoms have always been entirely compatible with non-malignant disease, and the microscopical signs have been in harmony with this view. I need only add that, although in nearly every case of laryngeal disease it is possible at the first inspection to form an accurate opinion as to the nature of the disease presenting itself, yet in a few rare instances the progress of the complaint alone permits its character to be determined. Unfortunately, the case of His Imperial Highness is among the latter number, and at this moment medical science does not permit me to affirm that any other disease is present than chronic interstitial inflammation of the larynx combined with perichondritis.

San Remo, February 12th, 1888.

REPORT OF THE EXAMINATION OF THE SLOUGH FROM THE LARYNX OF HIS IMPERIAL HIGHNESS THE CROWN PRINCE OF GERMANY.

By PROFESSOR RUDOLF VIRCHOW.

On the morning of Jan. 26th, 1888, Dr. Wegener brought me a sealed box, with a letter dated Jan. 23rd, from Dr. Shrader from San Remo. It was accompanied by a report dated Jan. 17th, from Dr. Krause, respecting a large piece of tissue which had been expectorated on the same day from the larynx of H.I.H. the Crown Prince.

The portion sent was the whole of the matter expectorated, with the exception of six small particles removed by Dr. Krause for examination in the fresh state. The piece of tissue was in a sealed bottle containing absolute alcohol. In addition to the large portion referred to, there were also two other separate and somewhat harder pieces—a larger and a smaller. The former, according to Dr. Krause, was originally a part of the principal mass. The examination offered great difficulties, the nature of which could not have been anticipated either from the form or the appearance of the pieces submitted for investigation. The large mass greatly resembled certain portions of imperfectly masticated pieces of meat, which are sometimes rejected in vomiting after being swallowed. This view seemed to derive support from the presence here and there of small yellow and brownish particles of fine cellular vegetable structure, and from the existence in the innermost portion of the large piece (expectorated) of an abundance of elastic fibres.

In consideration, however, of the very precise information conveyed by Dr. Krause to the effect that the substance had been observed before its separation (from the larynx) extending from beneath the left ventricular band from the middle to the anterior angle, and also below the glottis and even round below the anterior part of the right vocal cord, there could be no doubt, on further examination, that we had to deal with a large slough spontaneously separated from the inner surface of the larynx, and not with a purely exudative (fibrinous) mass. In the substance, which, according to the report of Dr. Krause, when first expectorated, measured three and a half centimetres in width, whilst at the thinner end it was half a centimetre in width (its thickness being four millimetres), and at the thicker end one centimetre wide, a small smooth semicircular spot in its long diameter could be seen. All the rest of the surface was occupied by long and very closely arranged fibres. Although there was no epithelium on the smooth spots and no glands beneath it, it cannot be doubted that this was the free surface of the mucous membrane. For beneath it could be seen microscopically a thin layer of almost homogenous connective tissue and a great mass of elastic fibres. Beneath this there was deeper down a very thick layer, consisting especially of tubules with granular amorphous contents. From this thick layer originated the long fibres observed with the naked eye. It was not once possible to recognise in these tubular layers and transverse stripes, but they seemed to contain only amorphous matter, in which, on more minute examination, numerous micrococci were found. Here and there numerous, but very small, clear blown bodies or crystal-like deposits were observed. Nevertheless, I have no doubt that these tubular layers and fibres are primitive muscular fasciculi, which through a necrotic process have been destroyed. The slough must therefore be regarded as a necrotic and decomposed part of the larnyx, which in parts has been separated from the surface to a depth of four millimetres. The very rich muscular structure could only be attributed to the thyro-arytenoid muscle.

I could not determine what kind of morbid process had caused the gangrene, nor what kind of process had produced the demarcation and exfoliation of the substance. Neither pus-corpuscles nor granulation-cells could be distinguished, and, in fact, in most places there was nothing of a heterogeneous nature to be discovered. Only in the larger (of the two smaller pieces), which had been cut off the main mass by Dr. Krause from a somewhat hard spot, and which had the form of a flat wart on section with the naked eye, a central whiter and an external and opaque rather thick covering could be distinguished. In every microscopic section so-called nests (*Zwiebln*) of epidermoidal cells, for the most part of a homogeneous character, were seen. As a rule, these nest-cells were in the most external layer or in that lying immediately beneath it. The external layer had also most likely consisted of an epidermoidal formation, though these cells could only be here and there partially distinguished. I could not find epidermoidal cells in the deep parts, and distinctly isolated alveoli were nowhere to be discovered, in spite of assiduous researches.

These examinations will be continued, and if any further result is obtained I will send a report instantly.

(Signed) RUDOLF VIRCHOW,
Jan. 29th, 1888. Director of the Pathological Institute, Berlin.

Professor Virchow has since sent several private letters, in which, however, he has not been able to add anything to his original report. Nevertheless, he remarks that he has not found any cartilage in any portion of the slough.

THE DEATH OF MR. McNEILL.

By ALFRED CHUNE FLETCHER,
SURGEON TO THE CHARTERHOUSE AND TO MERCHANT TAYLORS' SCHOOL.

THIS case has received such extraordinary publicity that it would be passing strange if the truth had not been liberally spiced with fiction. The actual ascertained facts have been masked by gossip, friendly and otherwise. A simple record of the circumstances may present sufficient facts of medico-legal interest to justify its publication.

Archibald McNeill, aged thirty-seven, was one of the best known and most popular of London journalists. He was instructed by the proprietors of the daily *Sportsman*, of which he was assistant editor, to write a report of the surroundings of the prize fight between Smith and Kilrain. Ignorant of the science itself, he was chosen merely as a brilliant descriptive writer. He accompanied the other journalists to Paris, and thence to the scene of action, a small island near Rouen. The fight over, they returned to Paris, and left for Boulogne on Tuesday morning, Dec. 20th. On the arrival of the train the boat was prepared to start. McNeill embarked with the rest of the party. Immediately afterwards he asked a colleague to mind his rug and bag, and went ashore again. He was seen later on, by the quay attendants, running to catch the boat, which, however, he lost by a few seconds. They aver it is a frequent thing for passengers to rush back to the train for something left behind, and to lose the boat as a result. It has, indeed, been carefully ascertained that the signal for the boat's departure may be of the vaguest, and that it is exceedingly easy to be on the quay and not be aware of her departure. This has been specially tested by the English detective. A pier attendant states that a man whom he recognised as McNeill lost the day boat, and asked him where and when the night boat would start. He then proceeded to the office on the quay, and sent off this telegram to the editor of the *Sportsman*: "Have missed the boat; in fact, I am afraid my head has gone wrong. Jim is coming up to Charing-cross by the train at 5.40. He will

help with any work. I will take night boat. Meet me." Much weight has been attached to the statements that at the time he left, McNeill was overworked and ill, that he insured his life, made his will, left his jewellery and some valuables at home, and behaved in altogether an extraordinary manner; and this telegram was adduced as further evidence of his strained mental condition. He lived at high pressure, but there is no ground for suggesting that he was at this time more hardworked than usual. In making his will and leaving valuables behind, he did what many other of his brother journalists did before starting on this particular mission, possibly fraught with unknown dangers. In insuring his life against accident by boat or rail, he followed what is found to have been his usual custom. On the Monday night at Paris he was cheerful and well. He was sufficiently keen on his work on Tuesday morning to rise betimes and interview Kilrain in bed. He took a first-class single through ticket, with its usual three coupons. One he gave up at Boulogne, the other two were found upon his body. The mystery is said to have begun when he left the boat as she was about to start, but a closer knowledge of McNeill points to this as a quite characteristic action. His most inveterate habit was to leave something behind him wherever he went. At the Hôtel de l'Athenée in Paris, for example, he left a pair of boots. He was almost certain to leave something in the train, and it is equally certain he would feel quite sure there would be just time enough to get it. He had borrowed a stick with a history which he had been specially warned not to leave behind. He would assuredly have made a special effort to rescue this. The expressions used in the telegram sent by the deceased are familiarly characteristic. A telegraph office had for him an irresistible fascination. He would send off on the smallest pretext long flowery fanciful telegrams containing quaint exaggerated expressions. He now found himself in so sorry a plight as scarcely to allow of exaggeration: left behind, unable to reach London until his paper had gone to press, stranded at the critical moment, in a mission which his proprietors deemed of international importance. To say that he feared he had gone wrong in his head would mean in the mouth of another man merely that he had made a fool of himself, or had gone silly. Having despatched this, he walked about during the afternoon and early evening. He engaged as interpreter a man named Dubois, *alias* Vermesch, who took him at night to one of the most respectable places of entertainment in Boulogne, the Café Fourny. He was remarked by several people there by his pleasant smile and bright, cheerful behaviour. He left the café with Vermesch at 10.30, having taken during the afternoon and evening three or four glasses of pale ale. Some time later a lady staying at an hotel heard on the quay cries for help, which attracted her attention from being uttered in English. This circumstance was mentioned by her to her husband and others before anything was known of McNeill's disappearance even. Sixteen days later the body was found at early dawn on the Capecure sands, stripped of all valuables, and bearing evidence of extreme violence. The upper two horn buttons of a new stoutly made morning coat were actually broken, and the coat torn asunder. These buttons were not found on the beach. In the pockets were some articles of no value, including several sheets of MS. descriptive of the fight, written most clearly on French telegraph forms. The literary style was conspicuously vigorous. His Bank of England notes, about £20 in coin, purse, gold spectacles, and other things were missing. The statement that a franc was found upon the beach is untrue. The following day an anonymous letter, in French, was received by the authorities, stating that the writer had picked up on the beach that morning the two bank notes enclosed. Before and during the holding of the necropsy that morning the Commissaire Centrale had freely stated that there had been no crime committed, but that the body had been robbed on the beach. To accord, possibly, with this suggestion, the notes were returned. When last seen in McNeill's possession they were clean and white. They now appeared to have been stained as first folded, and then refolded and stained again. The more exposed parts were dark brown, while certain portions of the inner folds were quite white. The paper was irregularly broken in several places, not at the edges, but in a manner to suggest considerable pressure, such as might be produced by the ball of the foot if they had been worn in the boot. Dirt was worn into the paper. Holes were absolutely worn through the flat surfaces of the folds. Stammers, the English detective, a "bank-note expert," believes they have been thus carried. He thinks they may have been dipped in salt water, but holds their appearance to entirely negative continued immersion with the body. The published statement that the condition of the purse indicates long immersion is deprived of its value by reason of no purse having been found. The result of the necropsy was so widely published that I need do no more than state briefly the conclusions come to by Dr. Aigré, who officially conducted it. He decided that the body had been in the water at least ten days, and it may well have been sixteen days; that several large wounds on the head were inflicted, beyond doubt, during life, with some blunt instrument (possibly a knuckle-duster); that death was actually produced by drowning, probably during unconsciousness. The clothed parts of the body were so entirely free from even bruises, and the wounds on the head were so uniform in character, that it was felt impossible to frame any theory which could account for their infliction by accident during life. Indeed, the conclusion of murder is officially accepted in France. His Excellency, the Minister of Foreign Affairs, M. Flourens, writing to the British Government, says: "The theory of accidental death, which might have gained credence at first view, has since been invalidated by the legal doctor who made the post-mortem examination. He came to the conclusion that death was the result of violence. He observed on different parts of the head prominent and numerous contusions received during life shortly before death, and which would have sufficed to cause loss of consciousness. He added that it was impossible for the victim to have inflicted in falling into the water, or before falling into the water, contusions so numerous, so grave, and so different in position." Vermesch was arrested. He had disappeared since the death. He had been busy at home mending the children's clothes. He could not speak English. He could not write. He had never seen McNeill. He inadvertently, however, signed some depositions. He now admits he is an interpreter, and that he spent the evening with McNeill, but says he left him immediately outside the café. The official record states that he has been previously found guilty of assaults and of robbery. He now remains under police surveillance. But French detective work out of novels is a sorry business. One detective arrived in Boulogne to make investigations. He was known immediately he arrived. There is no organisation and no money. Officialism demanded of McNeill's English friends even the threepence paid on the unstamped anonymous letter containing the notes sent to the authorities, and asked them for money to bear the expense of their police inquiries after the body was found. No official reward could be offered, and for a long time it was impossible to get consent for his friends to offer one. The case throws an interesting light upon the safety of foreign watering places. There are on record at least six cases of assault on English subjects for the purpose of robbery in Boulogne during the past year. It should be recorded that Lord Salisbury has repeatedly urged a vigorous action in the present case. The feebleness of the result shows the obstructive value of long-continued dogged inactivity.

A tribute should be paid to the kindly help of Dr. Harvey, who practises in Boulogne, and to the fearless impartiality with which Dr. Aigré stated his conclusions as to the cause of death. These conclusions, conspicuously unwelcome to the official mind, were arrived at in spite of great public pressure, but were ignored.

DEATH-RATES IN LARGE ENGLISH TOWNS IN 1887.

PENDING the publication of the Registrar-General's annual summary, the four quarterly returns, the last of which has just been issued, affords the means for determining the annual death-rate during the last year in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. In the aggregate of these twenty-eight towns the recorded death-rate was 20·8 per 1000, against 18·8 in the whole of England and Wales. The difference between these rates, however, does not correctly represent the excess of mortality in these towns, inasmuch as the age-constitution of the population of the large towns is unduly favourable to the death-rate, owing mainly

to the small proportion of elderly persons they contain. Corrected for this disturbing influence, the death-rate in the towns last year is raised to 22·2 per 1000, signifying that if the age-proportion of the population in the twenty-eight towns had been the same as that in England and Wales, the death-rate would have exceeded that in the entire population of the country by 3·4 per 1000; in other words, the mortality in the large towns would have been as 118 to 100 in the whole of England and Wales. Similar inequalities of age-distribution in the different towns renders it necessary to apply similar corrections to their recorded death-rates before they are strictly comparable. The necessary factors for this correction were published by the Registrar-General in his annual summary for 1883. In the following table are given the recorded and corrected death-rates in the twenty-eight towns in 1887, ranged in the order of the corrected rates, from the lowest.

DEATH-RATE PER 1000 IN 1887.

	Recorded.	Corrected.
1. Brighton	16·9	17·4
2. Derby	17·1	17·8
3. Norwich	20·4	19·6
4. Nottingham	18·7	19·8
5. Hull	19·3	19·9
6. Portsmouth	19·5	20·1
7. Leicester	19·5	20·5
8. Sunderland	19·7	20·5
9. London	19·6	20·8
10. Birmingham	19·7	21·0
11. Bristol	20·4	21·1
12. Bradford	19·9	22·0
13. Wolverhampton	21·7	22·3
14. Birkenhead	21·0	22·5
15. Leeds	21·1	22·5
16. Plymouth	22·7	22·5
17. Halifax	21·0	22·8
18. Sheffield	21·6	23·2
19. Bolton	21·3	23·4
20. Cardiff	21·9	23·8
21. Salford	22·2	24·1
22. Huddersfield	23·0	25·3
23. Liverpool	23·7	26·0
24. Oldham	23·8	26·5
25. Newcastle-on-Tyne	25·3	26·7
26. Blackburn	25·5	27·8
27. Preston	27·9	30·3
28. Manchester	28·7	32·0

It may be noted that the corrected rate is in every case, except two, higher than the recorded rate; the corrected rate is, however, for Norwich and Plymouth lower than the recorded rate, signifying that the age-distribution of these two towns is less favourable to the death-rate (owing to the high proportion of elderly persons) than that of England and Wales. The corrected death-rate in 1887 in the twenty-eight large towns ranged, therefore, from 17·4 and 17·8 in Brighton and Derby, to 26·0 in Liverpool, 26·5 in Oldham, 26·7 in Newcastle-upon-Tyne, 27·8 in Blackburn, 30·3 in Preston, and 32·0 in Manchester. The range shown by these death-rates is almost startling, but that surprise is checked by the knowledge that similar figures are issued year after year. In 1886, as in 1887, Brighton and Derby headed the list, with Manchester and Preston at the other end. Taking 100 to represent the mean mortality in Brighton and Derby in 1887, the mean mortality of Preston and Manchester would be equal to 177. The mean death-rate in these twenty-eight towns would be far lower but for the seven Lancashire towns, all of which find place among the ten at the bottom of the list for 1887, as was also the case in the list for the preceding year. It should be borne in mind that all these rates are calculated upon the populations estimated by the Registrar-General upon the hypothesis that the increase of population since 1881 has been at the same rate as that which prevailed during the last intercensal period, 1871-81. Having regard to the long-continued commercial depression, and the resulting decrease of marriage-rate and birth-rate, it is more than probable that the Registrar-General's method over-estimates the present population of most of our large towns, and consequently somewhat understates the death-rate. From a sanitary point of view the doubt thus thrown upon our official death-rates is much to be regretted, and affords the strongest argument in favour of a quinquennial census, at any rate in large towns.

THE BRITISH NURSES' ASSOCIATION.

A MEETING in support of the newly formed British Nurses' Association was held on the 13th inst. at St. George's Hall, Langham-place, Mr. Savory, President of the Royal College of Surgeons, in the chair. The attendance was large, most of those present, as was to be expected, being ladies actively engaged or warmly interested in nursing the sick; but Mr. Savory was, in addition, supported by many leading members of the medical profession. Amongst those present were H.R.H. Princess Christian of Schleswig-Holstein, President of the Association, attended by Miss Loch, Mr. Savory, Sir Joseph Lister, Sir Dyce Duckworth, Sir Joseph Fayrer, Sir Henry Acland, Professor Marshall, Dr. Quain, Dr. Douglas Powell, Mr. Tom Smith, Mr. Langton, Dr. Bedford Fenwick, Dr. Matthews Duncan, Dr. Samuel Fenwick, Mr. Brudenell Carter, Dr. Langdon Down, Dr. S. Sibley, Dr. Norman Moore, Mr. Wakley, and many other members of the medical profession; Mrs. Bedford Fenwick, Mrs. Deeble of Netley, Miss Wood, Miss Stewart, Miss East, Miss Sutcliffe, Miss Hetherington, Miss Mollett, Miss Huxley of Sir Patrick Dun's Hospital, Dublin, the Sister Superior of University College Hospital, Miss Thorold, Miss Barton, Miss Cooper, and many other matrons of large London and provincial hospitals. The general public were represented by the Dowager Countess of Shrewsbury, Mrs. Jeune, Mrs. Lankester, Mr. Oscar Wilde, and other well-known ladies and gentlemen. But the hall was filled to overflowing by sisters and nurses from metropolitan, provincial, and naval and military hospitals.

Miss WOOD, the honorary secretary, matron of the Children's Hospital, Great Ormond-street, having read the notice convening the meeting,

Princess CHRISTIAN expressed the pleasure she felt in taking part in the proceedings, the object being one whose importance could not be overrated. The meeting was held to lay the foundation stone—or rather, for that was already laid, to enlist public sympathy in furthering and building up the British Nurses' Association, which was intended to guard the interests of women engaged in that noblest of duties—nursing the sick—and to obtain for the calling of nursing the recognised position and legal constitution of a profession which should from henceforth be inseparable from the whole profession of medicine. It was, she believed, the first example of a large body of women combined to help their poorer sisters and elevate their calling, and might lead other women in other walks of life to combine and strive after higher things. From the nature of the Association, it would follow that in the future every recognised member of the nursing profession must have been educated up to a definite standard of knowledge and efficiency, a result which would prove as beneficial to the public at large as to the nurses themselves. In conclusion, Her Royal Highness expressed her thanks for the honour done her in permitting her to join in such a work, and quoted the following lines, which seemed to her to embody the true spirit of nursing:—

> "True service rendered, duties done
> In charity; soft speech and stainless days.
> These riches shall not fade away in life,
> Nor any death dispraise."

Mr. SAVORY said that his chief difficulty was that the cause they all had at heart was so good and so strong that it needed no advocacy to emphasise its claims upon the support of the public. There was no argument against good nursing. Even those who dislike doctors still appreciate good nursing, and human nature in this department has but one voice. In no department of the medical art had there been a more signal advance than in nursing, and he felt it almost a shame that it had not had greater appreciation. Of late years faith in drugs had decreased in the treatment of many diseases, and more reliance was placed on hygiene and good and skilful nursing. Security was given to the public as to qualification in the Church, Law, and Medicine, and the time had come when some definite status should be given to the nursing profession, in which the number of well-educated women was so great—a number, too, which was daily increasing. If such an Association as this could be founded, great advantage would accrue to nurses, the medical profession, and the public. It would be the object of

the Association to obtain a Charter. By legal registration it would guarantee the efficiency of nurses; by deliberation and discussion it would advance the great work of women, and increase their knowledge, skill, and usefulness; by the judicious distribution of distinction it would bring to the front those who were worthy of such a position; and, finally, it would provide for its members in old age and sickness. Giving up the best years of their lives to the care of the sick and suffering, no class, he thought, had higher claims to help in their hour of need than nurses. The Queen by her recent gift had shown her sympathy with the work of nursing, and that day her Royal daughter had by her gracious presence and her remarks bidden them be of good cheer. He wished the Association God-speed, and hoped it would prosper as it deserved to do.

Sir DYCE DUCKWORTH moved a resolution: "That this meeting, desiring to express its cordial sympathy with the British Nurses' Association, pledges itself to support the Association by every means in its power, and urges upon all nurses in the United Kingdom, who are eligible for membership, that they should join the Association, for the sake of promoting the advancement of their profession." The position of a trained nurse was not, he thought, understood by the public, the term being now applied indiscriminately to ladies and women who have undergone very different methods of training, and possess very different degrees of skill. It would be the duty of the Association to lay down the basis of education for nurses, so as to instruct the public as to what was really necessary in a trained nurse, for whom in the future there should be a three years' curriculum. Such a scheme could only be carried on by those who understood it—not by the laity; it was a special subject, and demanded special knowledge.

Mr. BRUDENELL CARTER seconded the resolution, and gave his unqualified approval to the Association, the tendency of which would be to raise the status of nurses. By combining, each would be stimulated to a higher standard of duty, and the public would take them, not only on their own merits, but also by the standard of the Association to which they belonged. He advocated unity for support and progress. The scheme was well considered, and the result would be that nurses would be raised in the estimation of the public and those with whom they had to deal. All followers of medicine and surgery recognised the debt due to nursing.

Dr. MATTHEWS DUNCAN joined in the general congratulations on the organisation of the Association and the largeness of the meeting. He reviewed the rise of the surgeons and physicians, and said that, in addition to knowledge and skill, a nurse required also in a high degree gentleness and meekness, and patience and firmness, and we might anticipate that nursing would in the immediate future be regarded as the noblest profession of man or woman. The practice of medicine and surgery stood alone, but nursing did not; it is combined with those two arts, and this combination could not be avoided. It was essentially co-operative work. In conclusion, he wished prosperity to the movement, in which all present were interested.

Dr. NORMAN MOORE said that they must rely on themselves. The formation of such a Society had been previously attempted—viz., in 1634, when Sir Peter Chamberlain advocated the project. Nurses were then, however, uneducated and almost untrained, and the scheme failed through the opposition of the physicians. It was now reintroduced under more favourable auspices; it had the cordial support of the medical profession, and was under the highest patronage. The only point the members of the medical profession wished to interfere with was the decision as to the efficiency or otherwise of nurses. On that point they were the only authorities, but all other details of the Association would be left to the nurses own management, under the guiding influence of the representatives of the medical profession on the General Council.

Miss WOOD said that large numbers of educated women were joining the profession, and some test was wanted as to sufficiency of training, both in time and quality, and such a Hall-mark it was the intention of the Association to supply. She exhorted the nurses present to unity, and by joining the Association to strengthen the hands of their country sisters and get in touch with the whole nursing profession throughout the United Kingdom. One thing had been definitely decided upon—viz., that no one should be recognised as a trained nurse until she had undergone three years' training. This Association was not to be considered a trades union; it did not intend to interfere with the contracts made by the boards of management of hospitals and their staffs of nurses, nor with the scale of payments given by the public for private nursing. All they intended and desired to do was to guarantee that when a nurse belonging to the Association goes out to her duties she is a trained nurse in every sense of the word, that her curriculum has been sufficiently long, and that her knowledge and skill have been tested by an examination sufficiently stringent to satisfy the leading members of the medical and nursing professions. She called upon all nurses present to come forward to make the Association a success, and expressed the indebtedness of herself and colleagues to the members of the medical profession for the assistance they had rendered in the elaboration of the scheme.

Mr. H. W. CROSS alluded to the great changes which had taken place in the art of nursing during the past twenty years. To excel in such a profession, women needed, in addition to their womanly qualities, special knowledge and training. This had already been recognised, but the systems for imparting such knowledge and giving such training in vogue at each school were dissimilar—there was no comparison of method, no unity of action. This Association deserved support, for it proposed to effect this much-needed unity. It would answer the question, What is a trained nurse? It would enable the public to discriminate between efficient and inefficient nurses. He commended the recognition at the outset of the importance of the support and confidence of the medical profession; that, whilst organising a profession of their own, they felt that they were subsidiary to the Medical Faculty, and that in all matters relating to training the voice of the medical profession is supreme.

Miss MOLLETT, matron of the Chelsea Hospital for Women, expressed thorough approval of the objects of the Association. It was not intended to organise a benevolent or charitable scheme, but it was intended to organise a legally constituted profession, and by means of the Association to thresh out the bran from the wheat, and to give to all those who deserved it the title of "Trained Nurse," a title which none but those who had a right to it would in future be able to use.

The resolution was then put to the meeting and carried unanimously.

Sir HENRY ACLAND then proposed: "That the best thanks of this meeting be tendered to H.R.H. Princess Christian of Schleswig-Holstein, for her kind acceptance of the presidency of this National Association, and for the active interest and work she is devoting to its progress." He remarked that Her Royal Highness took deep interest in the work of nurses in East London and in the country, while visiting among the sick poor was part of her daily duties. He alluded to the fact that Her Royal Highness was the translator into English of Esmarch's famous work on the "Care of the Sick and Wounded," and to the fact that her sister, who was now in dire trouble, through the illness of her husband, the Crown Prince of Germany, had organised in her adopted country a corps of nurses to attend to soldiers in war and to the civilian population in times of peace.

Dr. QUAIN, in seconding the resolution, which was carried with acclamation, expressed the hope that nurses would not rely too much on nature, and neglect the physician's prescription.

Sir JOSEPH FAYRER moved—"That the hearty thanks of this meeting be given to Mr. Savory, President of the Royal College of Surgeons, for his invaluable assistance to the Association, and for his kindness in taking the chair upon this occasion." He briefly pointed out the debt due to Mr. Savory for the part he had taken in the formation of the Association, and alluded to his scientific eminence and his high professional position.

Dr. DOUGLAS POWELL seconded the resolution, and, it having been carried unanimously, Mr. Savory returned thanks; after which the meeting terminated.

Some hundreds of sisters and nurses applied after the meeting for forms of application for membership. The arrangements were such, however, that only some 200 were able to obtain forms of application for admission to the membership of the Association, the remainder being requested to apply at 20, Wimpole-street, on the following morning. Upwards of seventy matrons of large hospitals have already been elected members, a fact the significance of which can hardly be over-estimated, as they must have many hundreds of nurses under their guidance.

THE TEACHING UNIVERSITY FOR LONDON.

THE following petition has, we understand, been signed by a majority of the teachers attached to the Westminster Hospital Medical School, and forwarded to the Privy Council:—

"We, the undersigned, teachers of the Westminster Hospital Medical School and members of the staff of the Westminster Hospital, respectfully beg to lay before the Most Honourable Privy Council the following reasons—in so far as they concern the Medical Faculty—in support of the petition now before the said Council from the Association for promoting a Teaching University in London:—1. We fully admit the necessity which exists for providing a medical degree for students of the metropolitan medical schools on conditions less restrictive and less prohibitive than those at present imposed by the University of London. 2. We are of opinion that in any plan proposed to meet this need there should be an intimate association of the teaching and examining functions, both being directly controlled by the same governing body. In such ways do we conceive that the true principles of a University are to be satisfied. 3. We regard the proposal made by the Royal College of Physicians and Surgeons as the least satisfactory way of meeting the acknowledged requirements, since it maintains only an indirect association of the teaching and examining functions, and would merely confer the title of University on an examining board. Such a plan, we feel sure, would not provide a satisfactory medical degree, or one that would be valued as it should by its possessors, although we fully recognise the excellent general character of the present examinations of the said board for qualifying purposes. 4. We are of opinion that either the proposal of the Association for promoting a Teaching University in London, or that of the University and King's Colleges now before the Privy Council, would satisfy the requirements, and, by associating together the various teaching bodies properly qualified, would establish a University that would be real and not one in name, offering also the opportunity for compelling some general training in arts, which is in almost universally accepted accordance with the spirit of a University degree, and is virtually disregarded by the proposal of the Royal Colleges of Physicians and Surgeons. 5. Having regard to the legitimate interests of existing medical schools, we are of opinion that the objects sought will be best attained by the plan proposed by the Association for promoting a Teaching University in London."

February, 1888.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6182 births and 3993 deaths were registered during the week ending February 11th. The annual rate of mortality in these towns, which had declined in the preceding five weeks from 23·8 to 21·9 per 1000, rose again last week to 22·2. During the first six weeks of the current quarter the death-rate in these towns averaged 22·8 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 15·2 in Brighton, 16·8 in Derby, 17·4 in Sunderland, and 17·6 in Halifax. The rates ranged upwards in the other towns to 28·1 in Wolverhampton, 28·2 in Manchester, 28·9 in Plymouth, and 36·4 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 478 and 506 in the previous two weeks, declined again last week to 492; they included 212 from whooping-cough, 74 from scarlet fever, 56 from diphtheria, 40 from measles, 38 from "fever" (principally enteric), 36 from small-pox, and 36 from diarrhœa. No death from any of these zymotic diseases was recorded during the week in Brighton, Birkenhead, or Halifax, whereas they caused the highest death-rates in Oldham, Blackburn, and Sheffield. The greatest mortality from whooping-cough occurred in Sunderland, London, Bolton, Wolverhampton, and Portsmouth; from scarlet fever in Hull, Blackburn, and Oldham; from measles in Derby, Blackburn, and Plymouth; and from "fever" in Nottingham and Blackburn. Of the 56 deaths from diphtheria in the twenty-eight towns, 40 occurred in London, 4 in Manchester, 2 in Oldham, 2 in Liverpool, and 2 in Huddersfield. Small-pox caused 31 deaths in Sheffield, 2 in Oldham, 1 in Bristol, 1 in Leeds, and 1 in Nottingham, but not one in London or in any of the twenty-three other large provincial towns. The Metropolitan Asylum hospitals contained 8 small-pox patients on Saturday last, against 7 at the end of the previous week. The number of scarlet fever patients in the Metropolitan Asylum hospitals and in the London Fever Hospital was 1543 at the end of last week, against numbers declining steadily in the preceding ten weeks from 2764 to 1650; the 153 cases admitted to these hospitals during the week showed a considerable increase upon recent weekly numbers. The deaths referred to diseases of the respiratory organs in London, which had been 591, 534, and 516 in the preceding three weeks, further declined last week to 504 and were 111 below the corrected average. The causes of 91, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Sunderland, Leicester, and in four other smaller towns; the largest proportions of uncertified deaths were registered in Hull, Preston, and Bradford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·4 per 1000 in each of the preceding two weeks, was 22·5 in the week ending February 11th; this rate exceeded, by 0·3 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·4 and 15·4 in Perth and Leith, to 24·0 in Glasgow and 27·5 in Aberdeen. The 568 deaths in the eight towns showed an increase of 2 upon the number returned in each of the preceding two weeks, and included 24 which were referred to whooping-cough, 13 to measles, 8 to scarlet fever, 8 to diphtheria, 7 to diarrhœa, 2 to "fever" (typhus, enteric, or undefined), and not one to small-pox; in all, 62 deaths resulted from these principal zymotic diseases, against 65 and 69 in the preceding two weeks. These 62 deaths were equal to an annual rate of 2·5 per 1000, which was 0·2 below the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 22 and 25 in the preceding two weeks, were last week 24, and included 12 in Glasgow and 4 in Aberdeen. The deaths from measles, which had declined from 26 to 9 in the preceding four weeks, rose again last week to 13, of which 8 occurred in Edinburgh, 3 in Glasgow, and 2 in Leith. The 8 fatal cases of scarlet fever and of diphtheria each showed a decline of 4 from the numbers returned in the previous week; 6 of scarlet fever occurred in Glasgow, and the 8 deaths from diphtheria included 4 in Edinburgh and 3 in Glasgow. The 7 deaths attributed to diarrhœa showed a further decline from recent weekly numbers. The two deaths referred to "fever" corresponded with the number in the previous week, and were returned in Edinburgh and Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 138 and 142 in the preceding two weeks, declined last week to 128, and were 5 below the number returned in the corresponding week of last year. The causes of 64, or more than 11 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 33·1 and 29·9 per 1000 in the preceding two weeks, was again 29·9 in the week ending February 11th. During the first six weeks of the current quarter the death-rate in the city averaged 33·2 per 1000, the mean rate during the same period being 23·1 in London and 24·0 in Edinburgh. The 202 deaths in Dublin last week corresponded with the number in the previous week; they included 9 which were referred to whooping-cough, 6 to scarlet fever, 3 to diarrhœa, 2 to "fever" (typhus, enteric, or undefined), 1 to measles, and not one either to small-pox or diphtheria. Thus the deaths from these principal zymotic diseases, which had been 33 and 25 in the preceding two weeks, further declined last week to 21, and were equal to an annual rate of 3·3 per 1000, the rate from the same diseases being 3·3 in London and 3·6 in Edinburgh. The fatal cases of whooping-cough, "fever," and measles showed a decline from the numbers in the previous week, while those of scarlet fever and diarrhœa showed no variation. The deaths of

infants were fewer by 10, whilst those of elderly persons showed an increase of 14 upon the number in the previous week Three inquest cases and 2 deaths from violence were registered; and 51, or more than a quarter, of the deaths occurred in public institutions. The causes of 29, or 14 per cent., of the deaths in the city were not certified.

THE SERVICES.

Deputy Surgeon-General J. Ferguson has been appointed Principal Medical Officer of the Northern District in succession to Surgeon-General W. M. Webb, promoted and appointed to Aldershot.

WAR OFFICE.—Army Medical Staff: Surgeon-General Thomas William Fox, M.B., is granted retired pay (dated Feb. 15th, 1888); Brigade Surgeon Walter Basnett Ramsbotham, M.D., has been granted retired pay (dated Jan. 23rd, 1888).

INDIA OFFICE.—The Queen has approved of the following promotions, amongst others, made by the Governments in India:—Brigade Surgeon William Roche Rice, M.D., of the Bengal Medical Establishment, to be Deputy Surgeon-General (dated Dec. 9th, 1887); Surgeon-Major Charles Frederick Oldham, also of the Bengal Medical Establishment, to be Brigade Surgeon (dated Oct. 24th, 1887).

ADMIRALTY.—The following appointment has been made: Staff Surgeon M. Ronan, to the *Fearless*.

MILITIA MEDICAL STAFF.—Surgeon-Major Metcalfe Johnson, 3rd and 4th Battalions, the King's Own (Royal Lancaster Regiment), resigns his commission; also is permitted to retain his rank and to wear the prescribed uniform on his retirement (dated Feb. 15th, 1888).

ARTILLERY VOLUNTEERS.—4th Volunteer (Cinque Ports) Brigade, Cinque Ports Division, Royal Artillery: Frank H. Shaw, Gent., to be Acting Surgeon (dated Feb. 11th, 1888).

RIFLE VOLUNTEERS.—13th Lancashire, Hugh Heald, Gent., to be Acting Surgeon (dated Feb. 11th, 1888).—3rd (Cambridgeshire) Volunteer Battalion, the Suffolk Regiment: Frederick Parlett Fisher Ransom, M.D., to be Acting Surgeon (dated Feb. 15th, 1888).—3rd (Dundee Highland) Volunteer Battalion, the Black Watch (Royal Highlanders): Acting Surgeon C. S. Young, to be Surgeon (dated Feb. 15th, 1888); Matthew Ferguson Anderson, M.B., to be Acting Surgeon (dated Feb. 15th, 1888).

Correspondence.

"Audi alteram partem."

THE TEACHING OF OUR NURSES.

To the Editors of THE LANCET.

SIRS,—The recent appearance of a "practical journal for nurses," under the title of *Nursing Notes*, calls, I think, for some comment in your columns, together with a firm protest against some of the practices therein recorded.

It would seem that there exists in this city a "Midwives' Institute and Trained Nurses' Club," where it is the custom for weekly meetings to be held and lectures delivered by members of the medical profession. In the two numbers of the journal already published reference is made to four such lectures, all by members of the same hospital staff, two of which are reported fully, and a promise for the publication of another which has for its title "Clinical Complications due to Fibro-myomata of the Uterus." From the report of the lecture on "Pneumonia" (given in place of one on "Eclampsia") I abstract the following:—

"The lecturer briefly explained the anatomy of the lung and its conditions in croupous pneumonia, describing the exudation into the alveoli as resembling somewhat the membrane in croup. He described the process of inflammation in the lung as in no way differing from the inflammatory process generally. He described how the air-cells fill with exudation. ..... It was to be specially remembered that croupous pneumonia is to be considered a general disease (more resembling the specific fevers), of which the pulmonary inflammation is the prominent symptom." Then follows an exhaustive enumeration of the symptoms of pneumonia, and in speaking of the nursing of a case he says: "There is another danger connected with the circulation: pulmonary embolism may occur; the patient is suddenly seized with pain, great difficulty of breathing, and dies from asphyxia or shock; brandy at once is the only thing to give, but the patient will most likely be too much occupied with the difficulty of breathing to be able to swallow it."

Now, I have been intimately associated in the working of a large nursing institution for nearly fifteen years, and have during that period regularly lectured to nurses, but I have not considered it desirable or fitting to treat of such subjects as those lectures referred to embrace, and, indeed, hold a very strong opinion that such subjects are wholly unsuited for consideration before an audience composed of persons who, however generally intelligent, have yet had no fundamental instruction or knowledge of the structure and actions of the organs concerned. If it be possible with any advantage to lecture to such an audience on such pathological problems as those involved in the extracts I have given, then I say that our entire plan of medical education is wrong, that the time our students spend in the study of anatomy and physiology is so much time wasted, and that the sooner our first year's men go into the wards the better. Whether nurses should be doctors as well as nurses is perhaps a question; but there can be no doubt that such lectures as those I have mentioned can give no real knowledge, but, on the other hand, may become positively dangerous, and in this statement I am supported by the letter of a nurse (the author of a work on Urine Testing) in No. 2 of the journal, who asks in reference to the above-quoted danger of collapse in pulmonary embolism: "Would a nurse be justified in so dire an emergency to give hypodermic injections of ozonic or pure ether, brandy, or *digitalin*, or to try inhalation of nitrite of amyl? If so, in what quantities?" That is to say, she gravely considers it may be right for her on her own responsibility to administer a drug which has been excluded from the Pharmacopœia on account of its highly dangerous and uncertain properties. Truly, in the interests of nurses themselves, no less than in those of our patients and possible victims, as well as our own, it will be well to know exactly where we are. The practical result of such teaching as these lectures exemplify is further seen in the correspondence columns of this same journal, when such a question as this is asked, presumably by a nurse: "What is the reason for pneumonia or bronchitis so often accompanying typhoid fever?" Surely such a subject is very far removed from a nurse's work, and would be a fair subject for discussion among trained pathologists and clinical physicians; and the reply given with the signature "M.D." in No. 2 sufficiently shows the worse than uselessness of such questions when considered among those ignorant of the groundwork of the subject, or of the very meaning of the words employed.

The recently passed salutary resolutions of the Royal Colleges in respect to advertising will fortunately stop further publication of such lectures; it is to be hoped that they will cease to be delivered. But at the present time, when the nurse's calling has been raised to the position of a "question," and has become the battle-ground for rival schemes to train, examine, certificate, and pension them (would that half the energy were devoted to the improvement of our cooks, and the nurses left alone quietly to improve on their present lines), it is well to know what some would appear to consider a desirable method of promoting their education.

I am, Sirs, yours faithfully,

Chandos-street, W., Feb. 12th, 1888. W. H. ALLCHIN.

CASE OF FOREIGN BODIES IN THE INTESTINE.

To the Editors of THE LANCET.

SIRS,—In the January number of the *Revue Médico-Pharmaceutique*, edited by Dr. A. Christidis at Constantinople, appears the following case, presenting points of practical interest.

In November, 1887, a man came to consult Dr. Siotis on account of pain in the epigastrium due to the singular fact of his having swallowed, as he judged, about fifteen Turkish gold coins. The day after the accident he took a strong dose of castor oil, which purged well, but failed to bring away any of the coins. Two more purgative doses only weakened him, and increased his pain so much that he consulted Dr. Siotis. The patient looked about thirty years of

age, had no fever, and no loss of appetite. Percussion over the abdomen elicited at the left hypochondrium an unmistakable metallic sound as of pieces of money in contact. With the stethoscope the rattle of the coins on movement was very distinct. The doctor ordered rest and this pill: Extrait d'opium, 10 centigr.; extrait de belladonne, 0·5 centigr.; 10 pil.; à prendre une toutes les heures. Next day he found in the fæces three coins, but at the same time a tumour presented itself in the rectum and caused great pain. The exploring finger found, in the rectal pouch, a cylindrical tumour formed by a fold of intestine, hard, and containing some of the pieces. Neither manipulation nor enemata succeeded in emptying this pouch, and Dr. Siotis returned to the pills. On the following day four coins were evacuated, and the tumour vanished, while pain was now felt in the right iliac fossa. Percussion here brought out a clear metallic ring. The order was now: Huile de croton, 2 gouttes; huile de ricin, 10 grammes; sirop, 50 grammes. Active purgation followed this dose, but not one coin passed, and the pain increased, so the opium and belladonna pills were resumed. Next day two pieces were passed. The metallic sound was gone, but still pain remained. The patient was advised to continue the pills, and was not again seen by Dr. Siotis for twenty days, when he met him casually, and was informed that the rest of the pieces had passed, and that he was perfectly well.

The points of interest in the case, as Dr. Siotis observes, are: (1) The large number of pieces swallowed; and (2) the uselessness, to say the least, of active purgation, and the satisfactory results that followed on the administration of opium and belladonna. I have thought the case would be of interest in confirming the practical treatment usually followed in cases of foreign bodies in the intestines: withhold purgatives, and use antispasmodics and sedatives. We may also, by observation of such cases, gain some knowledge of the way the intestines move and act under the influence of strong purgatives, on the one hand, and antispasmodics on the other, and so learn something to help us in the treatment of some forms of constipation and obstructed bowel.

I am, Sirs, yours obediently,

JOHN C. THOROWGOOD, M.D., F.R.C.P.

Welbeck-street, W., February, 1888.

ERYTHROPHLŒINE.

WE have received the following letter from Dr. Lewin, which we reproduce, together with a translation:—

SEHR GEEHRTER HERREN,—Ich lese in der letzten Nummer der LANCET einen Bericht des Herr Dr. Tweedy über Erythrophlœine, der mich nöthigt, obwohl dieses nicht meiner sonstigen Gewohnheit entspricht, darauf folgendes zu erwidern. Iedes Wort, das ich über die anaesthetische Wirkung des Erythrophlœine habe drucken lassen, ist absolut wahr. Herr Dr. Tweedy hätte besser Gethan ehe er diesem Mittel die anaesthesirende Einwirkung abspricht an einem Hunde einen Versuch mit einer Lösung von 0·05 grm.: 100·0 Wasser anzustellen, und er würde sich überzeugt haben, dass er voreilig ein Urtheil abgegeben hat. Ich kann andrerseits hervorheben, dass die anaesthesirende Wirkung hier in Berlin auch am menschlichen Auge erzielt worden ist. Mich als Pharmakologen interessirt diese praktische Verwendung erst in zweiter Reihe. Mir genügt es wiederum eine Substanz nachgewiesen zu haben, die an lebendem thierischen Gewebe Empfindungslosigkeit erzeugt. Dadurch wird die Wahrscheinlichkeit groesser dass auf chemischem Wege gewisse Punkte gewonnen werden koennen, die den bisher bekannten, local anaesthesirenden Stoffen gemeinsam sind. Dass das jetzt käufliche Erythrophlœine einer Verbesserung fähig ist daran zweifle ich nicht. Denn es finden sich in diesen Praeparaten Beimengungen, wie nicht hineingehören. Aber ein verunreinigtes Praeparat wie Herr Tweedy in Haenden gehabt hat, das naemlich Pupillenerweiterung macht, habe ich nie gesehen. Ich kann bestimt versichern, dass die Pupillen in allen meinen Versuchen unveraendert blieb, und kann hinzufügen, dass sich dies auch bei Versuchen, die hier in Berlin an Menschen angestellt wurden, ergeben hat.—Ich bin Ihr ergebenen,

Hinversinst., Berlin, Feb. 5, 1888. DR. L. LEWIN.

Translation.

SIRS,—I have read a report on Erythrophlœine by Mr. Tweedy in the last number of THE LANCET, and, although it is not my usual custom, I must hasten to reply thereto. Every word that I have published about the anæsthetic effects of erythrophlœine is absolutely true. Mr. Tweedy would have done better if before denying the anæsthetic effects of this substance he had experimented on a dog with a solution of ·05 gramme to 100 of water, and then he would have had to admit that he had formed too hasty a judgment. I can further prove that the anæsthetic effect on the eye of man has been obtained in Berlin. To me as a pharmacologist this practical use holds only a high secondary position. It suffices for me that again we have discovered a substance having anæsthetic effects on animal tissues. Thereby is the probability rendered greater that certain features, common to substances producing local anæsthesia, may be discovered by chemical methods. I have no doubt that the erythrophlœine of commerce is susceptible of improvement, and that foreign admixtures are to be found therein. But such a very impure preparation as that used by Mr. Tweedy—which, to wit, caused dilatation of the pupil—I have never seen. I am quite sure that in all of my experiments the pupils were unaltered, and I may add that the same result obtained in experiments made on man in Berlin.

I am, Sirs, yours sincerely,

DR. L. LEWIN.

To the Editors of THE LANCET.

SIRS,—I thank you for the courtesy of sending me a copy of Dr. Lewin's letter relating to my communication to THE LANCET of the 4th inst., on Erythrophlœine. Will you kindly extend the favour so far as to allow me to add a few words of comment and explanation?

I would remind you that I was careful not to throw doubt on the results which Dr. Lewin alleged he had obtained. I merely declared that with solutions procured from a trustworthy source I had been unable to obtain similar results, and more particularly that I had not only failed to observe appreciable anæsthesia, but had, in all cases, noticed decided dilatation of the pupil. In noting these differences I wished to express myself with reserve, saying: "In the face of these opposite results it would perhaps be well to assume that erythrophlœine has not yet been obtained in a simple and definite form, and that there is more than one active principle present in the substance now in the market." The solutions I used in my first experiments, and which Dr. Lewin condemns as "very impure," were, I am informed, made from a preparation by the well-known pharmaceutist Merck; but having ascertained shortly after the publication of my note in THE LANCET that this particular specimen was not recent, I asked Mr. Martindale to make me a 0·125 per cent. solution of the best and most recent preparation obtainable. This he did on the 9th inst., again using Merck's.

This solution was clear, the former ones having been somewhat opalescent. I have made many experiments with the fresh solution, and, with one exception, have obtained results substantially the same as those described in my letter of the 4th inst.—viz., considerable smarting on application, lasting from ten to thirty minutes, great blurring of the sight not dependent upon changes in the accommodation, pronounced circular spectrum halo around a naked light, *and very slight anæsthesia, if any.* The only difference was that while the former solutions produced decided dilatation of the pupil, the later caused a little contraction. Mr. E. T. Collins, the senior house-surgeon at the Moorfields Ophthalmic Hospital, who again, at my suggestion, made independent observations, has obtained substantially the same results as myself.

Unless we are to assume that erythrophlœine is capable of producing one effect in Berlin and the opposite effect in London, the contradictory results obtained by Dr. Lewin and myself are only to be explained in one of two ways: either we have not employed specimens having identical physical and chemical properties, or our modes of investigation and of interpretation are strangely at variance. It is, perhaps, only right to add that even in Berlin professional opinion is by no means unanimous as to the anæsthetic virtues of erythrophlœine. At a meeting of the Berlin Medical Society held on the 8th inst., Dr. Oscar Liebreich sharply criticised Dr. Lewin's statements, and warned pharmacologists against using erythrophlœine, which, he said, was never to be compared with cocaine.

I am, Sirs, yours truly,

Harley-street, W., Feb. 15th, 1888. JOHN TWEEDY.

VACCINIA AND VARIOLA.

To the Editors of THE LANCET.

SIRS,—Dr. Crookshank is no doubt right in stating that the intimate nature of the virus in vaccinia, as in some other infective diseases, has not yet been conclusively demonstrated, but the fact that it has long ago been shown to be particulate, both by Chauveau and Burdon Sanderson, places it in a different position, in respect to this question, to those other diseases where the evidence adduced in support of the view of their micro-parasitical origin rests upon morphological observations and inconclusive inoculation experiments.

With respect to the prevalence of vaccinia amongst cows, those who can speak from the observations of thirty and forty years ago will testify that it was then very frequent in different parts of the country, and it appears to be the fact that it is now rare; this, I think, arises from the circumstance that young calves are now treated differently from what they were formerly, and are generally, I believe, removed from their mothers when a few days old and brought up by hand; this isolation would thus tend to limit the occurrence of the affection, and may serve to account for the conflicting statements as to its prevalence.

In regard to the identity of vaccinia and variola, the results of different experiments being conflicting and inconclusive, it must be borne in mind that in other infective diseases, where it has been demonstrated that by passing the virus through an animal or series of animals of a different species its activity is modified, when it is retransmitted through animals of the species primarily affected it shortly regains its original virulence. This is equally the case in such diseases as anthrax, which is truly micro-parasitical; and also, as shown by M. Pasteur, in rabies and others, where the nature of the contagium is doubtful. We may, therefore, reasonably consider this a law of general application, and should expect that if vaccinia were merely variola modified or attenuated in virulence by passage through the cow, it would on reinoculation in the human subject, in the course of many generations, regain its pristine virulence; but long experience shows that this is by no means the case, and in the absence of experimental evidence to the contrary, we are entitled to regard the two diseases as distinct.

From a bacteriological point of view, Dr. Klein's conclusions that the micrococcus of scarlatina is a specifically distinct organism have been strongly opposed on the grounds that its points of difference from others are slight and with difficulty distinguishable. It is reported to have been said that "some minor differences ..... could not be accepted as a satisfactory method of distinction." This involves the difficult question of what constitutes a distinct pathogenic species. When, however, Drs. Lewis, Klein, and others lately maintained that the so-termed "cholera" comma bacillus was not a specific pathogenic microbe, but a common saprophyte widely distributed, it was persistently maintained by the followers of Dr. Koch that any difference, however slight, of form or habit among microbes constitutes a specific distinction; and now Dr. Klein is met by the opposite contention.

Fair criticism and discussion will tend to elucidate the very important issues raised by these investigations; but Dr. Klein's statement as to the specificity of the microbe he has described is not invalidated. Nor is it correct to say that his etiological investigation is deficient in any requisite step; it is as complete as the nature of the case and the different symptoms of the disease in man and the lower animals permit. He has complied with the postulates laid down by Koch for these cases, and which are universally accepted in bacterial pathology. The final confirmation alone is wanting—viz., that his experiments and observations should be repeated by an independent investigator. The full detailed report of the work is published, and anyone may readily judge for himself whether this is so or not.

I am, Sirs, yours faithfully,

Feb. 6th, 1888. G. F. DOWDESWELL, M.A.

THE LIST OF THE ROYAL COLLEGE OF PHYSICIANS: A CORRECTION.

To the Editors of THE LANCET.

SIRS,—At the suggestion of the Registrar of the College of Physicians, I ask you kindly to publish this letter in correction of an error which has slipped, strangely enough, into the last published list of the Fellows of the College, and which there appears to be no official mode of correcting until next year.

I went to Rome in November to escape the London fogs, and, having occasion while there to write to Sir H. Pitman, directed my letter from a hotel in that city. The Bedell to whom the drawing up the list is entrusted, seeing this letter, jumped to the conclusion that I had left London, and, to Sir H. Pitman's surprise, as well as my own, put my name down as living in a hotel in Rome. I am now in Genoa, on my way home, where I hope to arrive in a week or two, and must trespass on your goodness to allow me thus to rectify an error which may otherwise prove most injurious to me.

I am, Sirs, yours faithfully,

Harley-street, W., Feb. 11th, 1888. CHARLES WEST.

EFFECTS FOLLOWING THE RAPID EMPTYING OF A DISTENDED BLADDER.

To the Editors of THE LANCET.

SIRS,—The following may be of interest to some of your readers:—

F. H—— (an intimate friend of mine), aged twenty-three years, well built, perfectly healthy, left Lime-street, Liverpool, by the 12.45 night train for Edinburgh. An hour before starting he had eaten a hearty supper, with which he drank a pint of beer. During the journey he lay down reading and smoking, and fell fast asleep half an hour before reaching Carlisle. When the train stopped at Carlisle (at 4.15 A.M.), he awoke suddenly and hurried to the urinal, which happened to be exactly opposite the compartment in which he was travelling. After micturating freely, he in a few seconds felt slightly sick, and then, becoming "quite blind" and insensible, fell backwards full length. He was set on his feet by his fellow-passengers, and, though slightly dazed, feeling as if his head were "ice cold," and staggering, he walked back to the train. Ten minutes later he could scarcely realise that anything extraordinary had happened. With the exception of soreness about his elbows, head, and buttocks, which (owing to the heaviness of his fall) lasted two or three days, he experienced no further inconvenience. As he had never fainted or had a fit of any kind in his life before, my friend was naturally somewhat puzzled, if not alarmed. There can be no doubt that this was a case of fainting due to rapid emptying of a somewhat distended bladder. (I omitted to mention that he had not passed urine for four hours.)

Dr. Lauder Brunton gives a very lucid explanation of this accident (if it may be so called) in his work on Therapeutics. The case very well illustrates the points on which Dr. Brunton lays stress—viz., sudden awaking and rapid emptying of the distended bladder; and would form an excellent text for a sermon on the want of regard for the convenience of their passengers shown by the English railway companies.

I am, Sirs, yours truly,

Liverpool, Jan. 22nd, 1888. H. E. J.

ON THE TREATMENT OF CYSTIC GOITRES.

To the Editors of THE LANCET.

SIRS,—Mr. Mark Hovell, writing last week in THE LANCET on the excellence of treating cystic goitres by changing the cysts into abscesses, makes no mention of rubber cannulæ. In the article on "Goitre" in Quain's "Dictionary of Medicine," I have written, "The metal cannula should then be replaced"—the third or fourth day—"by an indiarubber one (made with a middle layer of webbing), the cannula being cut short as the cyst becomes smaller." I strongly recommend this plan, as doing away with the risk of irritating the walls of the goitre by the metal tube. The expense of a rubber cannula is only three or four shillings. Made with webbing it is very strong.

I am, Sirs, yours faithfully,

Canterbury, Feb. 11th, 1888. PUGIN THORNTON.

THE RIVER AIRE, LEEDS.—The pollution of this river was the subject of considerable discussion at a meeting of the Town Council held on the 8th inst. Ultimately the following resolution was adopted: "That the mayor be desired to bring about at an early date a conference of the corporations and sanitary authorities connected with the watershed of the Aire, for the purpose of discussing the means of reducing the lamentable pollution of the river."

MANCHESTER.

(From our own Correspondent.)

THE PROPOSED NEW FEVER HOSPITAL IN SALFORD.

WHEN the old hospital in Cross-lane, which at best was but a make-shift building, having been originally a block of private dwelling houses, was sold by the Salford Corporation to the North-Western Railway Company, an opportunity was afforded to obtain a new one, more in accordance with modern requirements and at little cost to the ratepayers; but the site which the Health Committee have fixed upon in the Eccles New-road is scarcely that which to a professional mind appears to be the best adapted for its purpose. Of course, wherever such an institution is erected, there will be an outcry from those whose dwellings are nearest to it. But the above proposed site has brought forth remonstrance, not merely from residents, but from many others who will not be personally affected thereby; from members of the Salford Town Council, from numerous ratepayers as well as medical men, a strong protest has gone forth, and an influential deputation has waited upon the Local Government Board asking for an inquiry into the matter before the Corporation be allowed to proceed with its erection. On the face of it there are certainly some strong arguments against the adoption of this site. It is situate only about 180 yards from the borough sewage works, where the sewage is treated in open tanks, giving rise at times to smells far from pleasant, and which cannot contribute to increase the supply of pure and fresh air so essential in the treatment of all zymotic disease. It borders on a piece of ground described as low, damp, and swampy, subject to periodical floodings by the polluted Irwell. It is closely adjacent to residential property which until the present has been largely of a better-class character, and it is but reasonable to expect that as soon as the Ship Canal is completed, which will run close to the locality chosen, the surrounding district will rapidly develop and become covered with buildings; and then the same conditions will exist as those from which they have escaped at Cross-lane; the hospital will become closely surrounded by dwellings and business premises—a most undesirable thing. It seems a great pity that some arrangement cannot be come to with the Manchester Corporation whereby the Salford cases of infectious disease could be received at the Monsall Hospital, where ample space exists for any amount of extension, and in a most eligible situation. Part of the Salford cases already go there, therefore the distance cannot be said to be prohibitory.

SANITARY ASSOCIATION.

At the annual meeting of the Manchester and Salford Sanitary Association, held last week in the Town Hall, a record of useful work attempted and done during the past twelve months was laid before the public. A simple enumeration of the subjects which have engaged its attention or that of its affiliated branches will prove the truth of this statement. The securing for the children the use of several School Board playgrounds after school hours; an attempt to close the Ardwick Cemetery as no longer a desirable place for the burial of more bodies, situate as it is in the midst of a crowded district and already sufficiently full of graves; the supporting Mr. Houldsworth's amendment to the Open Spaces Act, whereby powers were obtained for corporate bodies to grant pieces of land for open spaces; the diffusion of sanitary knowledge among the people by lectures and other means; and the endeavour to abate our smoke nuisance from which Manchester suffers so much: all these and other kindred matters deserve a more hearty support of the public than is represented by an annual subscription list of £150. Were it not for the voluntary work of its members such results as have been accomplished would have been impossible.

THREATENED OUTBREAK OF SMALL-POX.

For the past few weeks we have been threatened by an outbreak of small-pox. In this city, in Salford, and in many of the surrounding districts cases have been met with, though happily, by prompt action on the part of our health authorities, the disease has hitherto made no headway. These cases have, however, served to show the desirability of extending the notification of infectious disease, which obtains within the boundaries of the two corporations, to all the surrounding districts, which are for all practical purposes part of the same community. Up to the present time about thirty cases is the maximum number that has been in the Small-pox Hospital, though ample provision exists for more if it should be needed.

OWENS COLLEGE.

The Principal of Owens College laid some interesting figures before the last meeting of the Senate, showing the continued progress of the College and University. The report stated that there are at present 376 students in the Departments of Art, Science, and Law, of whom 197 are in preparation for the several degrees of the University. In the Department for Women there are 75 students, of whom 17 are preparing for degrees in the same University. In addition, there are 516 students in the evening classes, and about 300 in the Medical Department.

Manchester, Feb. 14th.

BIRMINGHAM.

(From our own Correspondent.)

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE thirteenth annual meeting of this body was held on the 9th inst., under the presidency of Dr. Page. The incoming President, Dr. Bostock Hill, delivered an address on Sanitary Jottings. While lamenting the decadence of this individual Society, he advocated an amalgamation of kindred Societies with a view to strengthen the action of the profession, and to combine for the diffusion of sanitary knowledge by the more plentiful supply of papers. He then sketched the history of a recent outbreak of diphtheria at Sutton Coldfield; he found that all the children attended the same school, and he attributed the cause to the tainted ground-air rising into the dwellings, and then spreading by direct infection through the schools. He approved strongly of the passing of the Margarine Act, and anticipated the early passing of an Act for compulsory notification of infectious diseases throughout England.

HOSPITAL SATURDAY.

A meeting of the General Committee of this movement has arranged for the collection this year to be made on May 12th. The chairman noted that during the last ten years there had been a steady increase in the receipts, and he had every confidence in the amount being this year larger than any of the preceding ones.

HOSPITAL ACCOMMODATION.

Some excitement has been caused in various circles by two incidents in connexion with this subject which have evoked comments in the daily press. In one, a patient was stated to have been discharged from a hospital, refused admission into another, and not taken into the workhouse until set down in the street by the cabman who had not received his fare. In the other, a patient whose clothes had been taken by a relative was wrapped in blankets and sent to a sister's house; this benevolent relative refused to receive her, she was driven back to the hospital, and thence to the workhouse, where she was taken in. The chairman of the medical committee of the hospital in question, along with the chairman of the Workhouse Infirmary sub-committee, addressed an explanation to the papers, whence it appears that their action in closing the wards on account of an outbreak of scarlet fever quite justified the removal of the patients in the interest of others and of the institution itself. For a long time past there has not been a sufficient number of beds in the various institutions for the demands made upon them, and at times difficulties necessarily occur in the attempt to admit the more urgent cases.

"OBJECTS OF MEDICAL CHARITY."

In the tickets of admission to the various medical institutions of the town there has lately been a revision of the above expression, which has occupied a time-honoured place on the notes. It runs now thus: "Is a proper object for the relief afforded by your institution." The various sources of contribution have tended to this alteration, and will probably lead to more radical changes still in the administration of medical relief. The article in THE LANCET of Feb. 11th in connexion with the provident system at

Manchester has elicited attention to the subject here, and we may look in the future for some remarkable changes in the administration of medical relief consistent with the progress of the times in which we live.

Birmingham, Feb. 15th.

LIVERPOOL.

(From our own Correspondent.)

THE ROYAL INFIRMARY.

THE clinical work at the Royal Infirmary is going on actively. Although the number of beds in the temporary buildings is considerably less than in the old infirmary, now pulled down, and in the magnificent new buildings now in course of erection, there is abundance of well-selected material for clinical instruction. The reduced number of beds has compelled the physicians and surgeons to select the more acute and therefore the better clinical cases, the chronic cases being admitted elsewhere.

In the medical wards there are the following cases. One of pneumothorax occurring suddenly in an apparently healthy man; he is recovering. Two cases of disseminated sclerosis of the spinal cord, and one of Cruveilhier's paralysis. One of perichondritis of the larynx, in which sloughing of part of the mucous membrane had taken place; the slough had come away, and the patient was recovering. In the female ward there is a very interesting case; the patient, a young woman, has left hemiplegia and hemianæsthesia, with single optic neuritis. There is also a case of syphilitic laryngitis with ulceration of vocal cords—psoriasis rupoides. Two cases of women who had the uterine appendages removed some years ago; one was suffering from phthisis, the other from intestinal obstruction. Recently a patient died from intestinal mycosis. The nature of the mycosis was uncertain. The patient, a young woman, had worked in Bradford. This fact suggested the possibility of anthrax, but its bacilli were not discovered. Among other recent cases there have been one of hydrophobia and one of Addison's disease.

In the surgical wards are, among others, the following cases. One of traumatic aneurysm of the popliteal artery, for which Mr. Bickersteth tied the femoral artery on the 6th inst. A case of double inguinal hernia; operated on, Dec. 17th last. Case of hydrocele of the spermatic cord with strangulated hernia; operation, 7th inst. Cases of perforating ulcer of the sole of the foot, of ulceration of palate, and of tumour of the breast; this last underwent operation on the 2nd inst. There are also two cases of hip-joint disease, two of strumous knee, one of nephrotomy, one of median cystotomy, one of umbilical hernia, one of false neuroma, amputation of arm for malignant disease, and excision of elbow. From these it will be seen that there is no lack of material for the clinical study of both medical and surgical cases.

THE ROYAL SOUTHERN HOSPITAL.

At the annual meeting of the above hospital, held on the 13th inst., it was announced that Mr. Robert Hamilton had resigned his office of surgeon to the hospital, which he had held for a period of thirty-one years. It was stated that the wards had been very full during the past year in consequence of the rebuilding of the Royal Infirmary. The new horse ambulance had done good service, but there was urgent need for increased support.

Liverpool, Feb. 14th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

GATESHEAD GUARDIANS AND THE WHITE LEAD MANUFACTURE.

IN a previous note I referred to the action of the Gateshead guardians arising out of the number of persons becoming chargeable to the union owing to the effects of lead-poisoning; and the guardians passed a resolution calling for the substitution of machinery for female labour in this deleterious employment. A reply to their remonstrance to the Local Government Board has now been received, and the letter states that the Secretary of State had been advised that, looking at the construction of white-lead works, covering as they did a large space of ground, it was not possible to require machinery to be used, even if it were proved beyond contention that white lead could be produced in existing works as a commercial success by the aid of machinery. There were two methods, the letter went on to say, by which the production of white lead would be free from danger: one was the production of the article as a sulphate of lead, which was innocuous, in place of carbonate of lead; the other was the manufacture of carbonate of lead by mechanical means, by which the workpeople did not come in actual contact with the material, all the processes being carried on in covered vehicles and by machinery. Many experiments and inventions had been made in that direction, but hitherto, except in one instance, none had succeeded commercially. In the discussion on the reading of this, one of the guardians expressed his belief that it had been proved beyond a doubt that white lead could be made of better quality and cheaper by machinery. Of course, if this statement is correct the adaptation of machinery to this dangerous employment is only a question of time. Meantime, the danger might be mitigated by the observance of strict cleanliness and necessary precautions on the part of the *employés*, and the wearing of the simple but efficient respirator suggested and shown at the Newcastle Royal Exhibition by our fellow-citizen and *confrère*, Mr. H. W. Newton.

LIDDELL PROVIDENT DISPENSARY, JARROW.

The Liddell Dispensary at Jarrow is a very large concern, as will be seen from the following figures quoted at its late annual meeting. The membership on Dec. 31st last was as follows: Twelve friendly societies, representing 853 members, and family members, representing 2080 persons. The medical report stated that the visits to patients' houses numbered 6910; consultations at dispensary, 10,037; prescriptions dispensed, 15,824. There is no mention in the newspaper report of the remuneration received by the medical officer for this immense amount of work; it is, however, to be hoped that it is commensurate with the labour, and that provision for superannuation is not overlooked by the governors.

DURHAM COUNTY HOSPITAL.

At the annual meeting of the governors of the Durham County Hospital, it was stated that 340 in-patients and 856 out-patients had been treated during the year. Altogether there had been a total of 1588 cases treated, not counting minor operations, teeth extraction, &c. There had been a small excess of income over expenditure. On the other hand, the Hospital Sunday and Saturday collections show an increase of about £52 over those of previous years.

NEWCASTLE LYING-IN HOSPITAL.

The report of the committee presented to the governors of the Newcastle Lying-in Hospital, Dr. Nesham presiding, shows that 263 cases had been attended during the year, and that no death had occurred. The financial state of the hospital was satisfactory, the sum due to the bankers having been reduced to about £38.

Newcastle-on-Tyne, Feb. 15th.

GLASGOW.

(From our own Correspondent.)

GLASGOW UNIVERSITY EXTENSION: "ST. MUNGO'S COLLEGE."

THE University has now made public its scheme for the extension of University teaching. This is to be worked by a board on which we find as members the Senate and a large representation of the general public interested in education. Courses of lectures are to be delivered in Glasgow and the neighbourhood, to be followed by examination in due time and the distribution of certificates. A similar scheme has worked well in the University towns in England, and ought to do equally well here. But a much more sweeping plan of reform *ab extra* is now fairly before the public. There has just been issued the text of a Bill which has been introduced in the House of Commons providing for the erection of the medical school of the Royal Infirmary into "St. Mungo's College of the University of Glasgow." This is to be done,

according to the single short preamble with which the Bill opens, not in the interests of the Royal Infirmary, but "in the interests of learning, and more especially of medical education and science." It would have been of some advantage to those outside Glasgow and not familiar with the facts of the case and the precedents of the agitation if some evidence of the existence of this disinterested motive had been furnished; certainly some justification of such an extraordinary proposal ought to have been given by reference to the origin of the school it is proposed to elevate, to its career during the past ten years, and to its future prospects. The silence of of the Bill on these essential points is well understood in Glasgow. Turning to the thirty-six clauses by which the preamble is followed, there is unfolded in them a plan of the most comprehensive description, one going far beyond that for an east-end medical college affiliated to the University. After defining the constitution of the body of governors, which is drawn up very skilfully, the Bill indicates the powers with which they are to be invested. These include the appointment of professors and lecturers, not only in medicine, but also in the other arts, sciences, and branches of learning. Plainly what is contemplated is not merely a medical school, but a complete group of Faculties, as in a University. The governors are to have extensive powers in the way of purchasing land, houses, &c. for providing lecture-rooms, houses for the residence of the professors of the College, and so on. The professors are to have the same "status, duties, rights, and privileges" as those of the University; while the students are to enjoy the same privileges, and be subject to the same discipline and regulations as those of the University. The scheme contemplated is a bold one; its expediency is a totally different matter, and has yet to be demonstrated. Those who hope for healthy University development will look rather to Professor Edward Caird's scheme for the strengthening of the University from within than to such ill-considered legislative attempts as that sketched above.

Glasgow, Feb. 14th.

DUBLIN.

(From our own Correspondent.)

DUBLIN HOSPITAL SUNDAY FUND.

THE Council, in their report read at the annual meeting, held last week, state that the total amount of the collections for 1887 was £3957 9*s.* 8*d.* This shows a decrease of some £200 as compared with the previous year, a result due to the great depression which still exists throughout the country. The Council refer to the Bill brought in by the city members proposing legislation regarding the Dublin hospitals on the lines indicated in the report of the Commission appointed by Lord Spencer to inquire into the management of these institutions; but, strange to relate, neither the Commission of 1885 nor the promoters of the Bill communicated with the Council of the Fund on the subject, although both were disposed to deal with the funds collected on Hospital Sunday. The Committee of Distribution having ascertained that a sum of about £3700 was available for distribution, distributed £3435 amongst the participating institutions in consideration of subscriptions received and work done, with an added bonus of 7½ per cent. to those hospitals which had provided trained supervision for their nurses, thus following the same plan as in 1886. The Adelaide Hospital obtained £847 16*s.* 6*d.*, the highest amount allocated to any institution, and the Whitworth £40 0*s.* 10*d.*, the lowest.

PROPOSED M.D. DEGREE FOR THE IRISH COLLEGES.

The Royal College of Surgeons in Ireland and the College of Physicians are presenting a petition to Her Majesty to obtain a new Charter, so as to possess powers to grant a degree which shall carry with it the title of "Doctor." This action of the Colleges is for the purpose of their being placed in an equal position with the London and Scotch Colleges in obtaining the power to confer an M.D. degree.

CITY OF DUBLIN HOSPITAL.

At a recent meeting of the medical staff, Dr. Thomas Smyth, resident surgeon, was presented with an address and a gold watch, in recognition of the efficient manner in which he had discharged the duties of his post.

SMALL-POX IN DUBLIN.

About a dozen cases of small-pox are under treatment in hospital. The week before last several fresh cases occurred, and this week a person was attacked with a disease in a house in which there had been previous cases. As showing the benefit of revaccination, it may be mentioned that this latter patient was the only person in the house who had not been recently revaccinated.

Surgeon-Major J. R. Keogh has been appointed to the Commission of the Peace for Queen's County.

Dublin, Feb. 14th.

PARIS.

(From our own Correspondent.)

ALBUMENS.

IN his researches on normal and pathological albumens, M. Joseph Béchamp, a distinguished biologist, has brought to light two facts. The first, which interests the physiologist as well as the philosopher, is that, by the attentive study of the nitrogenous matters of the eggs of oviparæ, the author has been led to this remarkable conclusion—viz.: *Even chemically an animal is what it is in the egg from which it proceeds*, not only as regards its organised elements, but by the different nature of its albumens, its other albuminoid matters, and its zymoses (fermentiscible principles). The second fact, which interests pathological physiology, and particularly diagnosis, is that, in effusions, there never exists one albumen alone, which would be that of the serum of the blood; but there would be several, which differ from it individually and profoundly, among which are the zymoses. In submitting these researches to the Academy of Sciences, M. Béchamp has, moreover, established the fact that there exists a relation of cause and effect between the membrane or the morbid tissue, through which the transudation is produced, and the albumens of the effusion, which are always the same, variable only in quantity for the same tissue that has been traversed. In other words, the membrane or the morbid tissue exercises a profound chemical action on the albumens of the blood.

THE TRANSPORT OF OXYGEN.

Dr. Hénocque is the inventor of a method of examining the blood, based on the fact that in examining the thumb-nail with a small spectroscope one could follow the transformations of oxyhæmoglobin, the substance which, contained in the globules of the blood, serves to transport in tissues the oxygen furnished by the air. In this way, one can easily measure the rapidity with which the interchanges of the oxygenated blood and the anatomical elements take place. Dr. Hénocque has just performed some physiological experiments from the Tower of Eiffel which is being erected for the great Exhibition of 1889. The object of the experiment was precisely to determine the influence exercised on the activity of these changes by the ascension of 270 steps of the staircase to reach the height of 55 metres, which nearly represents that of the first floor of the tower. The experiments performed by Dr. Hénocque on three tourists have confirmed the results obtained by him in other circumstances—viz, that the activity of reduction is augmented by the muscular exertion caused by the ascension of a staircase, or, in other words, that the muscular labour is accompanied by a greater activity in the exchange of the oxygen between the tissues.

THE ACTION OF BILE.

At a recent meeting of the Academy of Sciences, M. A. Dastre read a paper on the action of bile on alimentation. After having recalled the results of his researches on the presence and the action of the bile in the stomach, and stated that he was very probably the first who had practised the operation of cholecysto-intestinal fistula, the author gave the results of this operation executed from a physiological point of view—that is to say, with the view of solving the problem of the digestion of fats. The conclusion of this important study is the following: "If the observation of the rabbit—in which nature had realised, so to speak, the experiment of the cholecysto-intestinal fistula, which experiment is the counterpart of that performed by the author on the dog—teaches us that the bile alone is, in the living,

powerless to effect the digestion and the complete absorption of fats, experience teaches us, on the other hand, that the pancreatic juice alone is equally powerless. Their mixture is necessary. The bile intervenes as well as the pancreatic juice in the digestion of fatty substances. The bile appears more particularly charged with the absorption of fats in kind; the pancreatic juice for their division."

Paris, Feb. 14th.

Obituary.

J. H. WALSH, F.R.C.S. ENG.

("STONEHENGE"), EDITOR OF "THE FIELD."

ON the 12th inst. the death occurred, at his residence at Putney, of Mr. J. H. Walsh ("Stonehenge"), than whom there was no greater authority in the world on the subject of sport. Mr. Walsh was born in 1810, received his professional education at Guy's, becoming a Member of the Royal College of Surgeons in 1832, and a Fellow in 1844. When a student he made a wax model of the Siamese Twins, when they were over here as boys, and the model is still in the museum of the College of Surgeons, Lincoln's-inn-fields, with his name attached. Immediately after obtaining his qualification, Mr. Walsh settled down to the practice of his profession in Worcester, where his efforts met with success, and where he remained until 1852. About this period he suffered the loss of a thumb and two fingers by the bursting of a gun. A curious incident arose from this accident. Mr. Walsh had to resort to a neighbouring practitioner with whom he was not on very friendly terms for the amputation of his shattered digits, and he has often been heard to express his high admiration of the skill displayed by his colleague in the performance of the operation. It is needless to add that a more kindly feeling after this episode existed between the rival followers of the healing art. Mr. Walsh in 1852 took a dislike to country practice, and, being a man of means, spent some years in travelling for sport and amusement on the Continent and in America. He ultimately settled in London and devoted himself to literature as a profession in 1855, when he became associated with *Bell's Life*, to which he contributed some articles on the Greyhound. These were published in the same year in book form, under the title of "The Greyhound," and shortly afterwards the first edition of "British Rural Sports" appeared. As he was an acknowledged authority on coursing and all kinds of sport, having in 1856 published "The Horse in the Stable and the Field" and "The Shot Gun *v.* Rifle," Mr. Walsh was in 1857 selected by the late Serjeant Cox, the proprietor of the *Field*, to fill the editorial chair of that journal, to the success of which newspaper he in a great degree contributed. He subsequently published works on "Domestic Economy" and "Domestic Medicine," and in 1858 "The Dog in Health and Disease." Some years later he wrote "The Dogs of the British Islands," which passed through several editions; and in 1882 he produced the first volume of "The Modern Sportsman's Gun and Rifle," the second following in 1884. He was perhaps best known as the author of "British Rural Sports," of which no fewer than fifteen editions have been issued.

Some twelve months ago Mr. Walsh suffered from hæmaturia, and was sounded for stone by Sir Henry Thompson, who, however, failed to detect a calculus. He also sounded himself repeatedly, but did not discover a stone until the last few weeks. Mr. Sydney Jones, who was summoned, examined him and detected two calculi. A successful lithotrity was performed at the commencement of last week, and a favourable result was anticipated. Other complications, however, arose, prostrating him so completely as to result in a fatal termination. Mr. Walsh was three times married, his last wife being the daughter of the Rev. Mr. Parker, vicar of Pershore; and he is survived by two daughters.

WILLIAM BOYD MUSHET, M.B. LOND., M.R.C.P.L.

DR. MUSHET died suddenly on November 17th last at Aldershot. Some months previously he had, through failing health, been obliged to give up the exercise of his profession. He was born in 1828, and educated at the Royal Huntingdon Grammar School. He entered University College as a student in 1849, and passed M.R.C.S. and L.S.A. in 1852. He was an M.B. London in 1855 (Gold Medalist in Medicine, Medalist in Materia Medica and Therapeutics), and became a Member of the Royal College of Physicians, London, in 1863. Dr. Mushet had held the appointments of Physician to the North London Hospital for Consumption, the Royal General Dispensary, and the Jew's Hospital, Norwood; Resident Physician to St. Marylebone Infirmary, and latterly was Honorary Physician to the Seaside Convalescent Institution for Women at New Brighton. He was the author of "Man and Apes," a lecture (1864); "A Practical Treatise on Apoplexy" (1866), a work which obtained some celebrity; "Cholera: its Etiology, Contagiousness, and Treatment" (1875); besides many papers and reviews in the medical journals. His contributions to the ordinary literature of the day also included "The Workhouse," a poem; "Hyde Park," a satirical *brochure*, published anonymously in 1871; and "The Age of Clay," a rhythmic satire, his last literary effort, published in 1883.

Medical News.

UNIVERSITY OF LONDON.—The following gentlemen have passed the Intermediate Examination in Medicine held during January:—

Entire Examination.

FIRST DIVISION.—Herbert Stanley Ballance, King's Coll.; A. E. Berry, Owens Coll.; A. Wilson Boning, Univ. Coll.; C. R. Box, St. Thomas's Hosp.; Philip Rashleigh Dodwell, Univ. Coll.; J. McDonald Gill, Guy's Hosp.; F. W. Hall, Guy's Hosp.; Edward Victor Hugo, St. Barthol. Hosp.; R. Ellis Lord, B.Sc., Owens Coll.; Algernon Wilson Lyons, King's Coll.; Hugh J. Moore Playfair, King's Coll.; Henry Stephen Sandifer, King's Coll.; J. H. Sykes, Owens Coll.

SECOND DIVISION.—A. Morgan Cass, Owens Coll. and Manch. Royal Inf.; Bertrand E. Dawson, Lond. Hosp. and Univ. Coll.; Howard Distin, King's Coll.; Percy William Dove, St. Barthol. Hosp.; E. R. C. Earle, Univ. Coll.; C. J. Girling, Guy's Hosp.; G. Saint Johnston, Queen's Coll. Birmingham; H. Brunton Kitchin, Univ. Coll.; T. Frank Ricketts, B.Sc., Guy's Hosp.; Llewellyn Roberts, St. Barthol. Hosp.

Excluding Physiology.

FIRST DIVISION.—W. Adams Clark, St. Barthol. Hospital.

SECOND DIVISION.—Eric Leonard Norman Pridmore, Univ. College; J. A. Waring, University Coll.

Physiology only.

FIRST DIVISION.—A. W. Warrington Lea, Owens Coll.; S. Wolferstan Morgan, Bristol Med. School; J. A. Pickels, Owens Coll.

SECOND DIVISION.—Elias G. Hall, Bristol Med. School; H. Langdale, Owens Coll.; F. Ryott Percival Taylor, Westminster Hosp.

M. EMILE ROSSEAU, the eminent French chemist, died on the 6th inst., at the age of seventy-two.

A NEW medical journal is about to appear in Berlin under the title of the *Berliner Clinik*. It will be edited by Prof. Fürbinger and Dr. Hahn.

CREMATION IN FRANCE.—At a meeting in Paris, on the 29th ult., of the French Cremation Society, the President announced that he had received from the Ministry the assurance that an edict rendering cremation legal would very soon be promulgated.

A HERBALIST was indicted at Leicester Assizes on the 10th inst. for performing an unlawful operation upon the wife of a local confectioner. The prisoner was acquitted of murder but found guilty of manslaughter, and was sentenced to twelve years' penal servitude.

THE fourth International Otological Congress is to be held in Cologne from Sept. 10th to 16th, 1888. The date of meeting has been altered to the week mentioned in order to admit of members being present at the Congress of German Naturalists.

ST. THOMAS'S HOSPITAL.—The Queen of Sweden, accompanied by Dr. Salin, the Court Physician, inspected St. Thomas's Hospital on Tuesday afternoon. The Queen was received by the principal officers of the institution, by whom her Majesty was conducted through the wards and departments.

VOLUNTEER MEDICAL ASSOCIATION.—The inspection of the Ambulance Class and awarding of certificates by the Lord Mayor will take place at the Guildhall on Saturday, the 18th inst., at 5 P.M., and medical men and friends will, we understand, be admitted on presentation of card. The mess of the Volunteer medical officers will meet afterwards, at 7 P.M., at the Holborn Restaurant.

THE PARKES MUSEUM.—The Merchant Taylors' Company have recently voted ten guineas to this museum, to aid in its work of practical teaching and demonstrating sanitary science.

QUADRUPLETS.—The wife of a bricksetter, residing in Organ-street, Leigh, Lancashire, has received the Queen's bounty of £3. A few days ago she gave birth to four children. Three, however, were still-born, but the fourth is alive and doing well.

MEDICO-CHIRURGICAL SOCIETY, ABERDEEN.—The following gentlemen were admitted as honorary members of this Society at the meeting on the 2nd inst.:—Sir Andrew Clark, London; Drs. Matthews Duncan (London), David Ferrier (London), Alexander Harvey (London), Thomas Keith (Edinburgh), William Bruce (Dingwall), Samuel Davidson (Wartle), Patrick Jamieson (Peterhead), William Lyon (Peterculter), Alexander Manson (Banff), and Charles Smith (Kinnairdy)

ROYAL COMMISSION ON THE BLIND, DEAF AND DUMB, AND IMBECILE.—Meetings of the Royal Commission were held on Tuesday and Wednesday, the 7th and 8th inst., at 6, Old Palace-yard, Westminster, Lord Egerton of Tatton, chairman, presiding. On Tuesday Dr. Francis Warner, F.R.C.P., physician to the London Hospital, gave evidence as to weak-minded children in public elementary schools; and on Wednesday Dr. George E. Shuttleworth, medical superintendent, and Mr. J. Diggers, secretary, Royal Albert Asylum, Lancaster, were examined as to the provision in England, educational and otherwise, for the imbecile class.

VENTNOR HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—The annual meeting of the subscribers to this hospital was held on the 13th inst., when it was reported that the receipts for the past year had amounted to £10,245 and the expenditure to £8710. The number of in-patients received during the year was 666, the mortality was 21, showing a percentage of 3·8, and the average duration of each patient's stay was over two months. On the 11th inst. Her Majesty the Queen paid an informal visit to the institution, and was pleased to express her approval of the condition and management of the building. Amongst those who telegraphed their inability to be present to receive Her Majesty was Dr. Hassall, one of the founders of the hospital.

THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of this Association held on the 9th inst. at the offices of the Association, King-street, Manchester, Dr. H. Simpson made some suggestions in regard to co-operation between local sanitary authorities in respect of milk supply. He said that what was wanted was some system of supervision which should, if possible, prevent the origin and spread of epidemics rather than arrangements to stamp them out when they were at their worst. He was not armed with a plan by which that could be carried out, but he thought Dr. Ransome's suggestion was a good one, that there should be formed a voluntary association of milk venders, subject to certain rules and regular inspection; to aid in carrying out the existing legal powers for the regulation and inspection of cowsheds; to ensure a sanitary inspection of farmhouses, and to secure the analysis of milk. In the discussion which followed, Dr. Kenyon (Chester) said he thought England was the only country where the people drank raw milk. If it were boiled there would be no danger of infection. Dr. Tatham occupied the chair.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following is the syllabus of three Lectures on Suppuration and Septic Diseases, to be delivered in the theatre of the College on Monday, Wednesday, and Friday, Feb. 20th, 22nd, and 24th, at four o'clock each day., by Professor W. Watson Cheyne, F.R.C.S.:—*Lecture I.:* Introductory remarks. Description of the various pyogenic organisms. Relation of streptococcus pyogenes to the coccus of erysipelas. Occurrence of these organisms in suppurative diseases. These organisms can cause suppuration, as shown by (*a*) experiments on animals, (*b*) experiments on man, (*c*) the anatomy of abscess. Can suppuration occur without micro-organisms? *Lecture II.:* The pyogenic cocci may be present in the human body without causing suppuration or septic diseases. Conditions necessary for infection—embolism, general and local depression of vitality, inflammation, cold, injury, irritating chemical substances, seat of inoculation and the anatomical arrangement of the part. *Lecture III.:* Conditions necessary for infection (continued)—Various less definite conditions on the part of the body, species of organism, dose of the organisms, virulence, concurrent growth with other bacteria, influence of season and locality. Occurrence of pyogenic organisms outside the body. General considerations.

THE SEWERAGE OF CAMBRIDGE.—At a special meeting of the Cambridge Improvement Commissioners, held od Tuesday last, it was decided that the system to be adopten for the disposal of the sewage shall be that of "broad irrigation," provided that a sufficient area of land can be purchased at a reasonable price, or taken on lease under favourable conditions as to tenure. It was also resolved that no scheme for the conveyance of the sewage to the pumping station be adopted unless it can be connected with a scheme for the reconstruction of all existing sewers and drains which are found to be defective.

MEDICAL NOTES IN PARLIAMENT.

The Death of Mr. McNeill.

IN the House of Lords on the 14th inst., the Earl of Dunraven wished to ask the Prime Minister a question, of which he had given him private notice, in connexion with the lamentable death, under very suspicious circumstances, of Mr. McNeill at Boulogne in December last. Their lordships knew the circumstances, and he need not further refer to them. His lordship had seen it mentioned in the newspapers yesterday that, practically speaking, the investigation into the causes of Mr. McNeill's death had ceased. He wished to ask whether there had been any communications between Her Majesty's Government and the French Government on the subject; whether there was any truth in that rumour; also in view of the very grave suspicion of murder, whether Her Majesty's Government would make any further representation on the subject.—The Marquis of Salisbury: I have reason to doubt that it is true that investigation in this case has been given up. Our latest information is that the French Government has assured the British Ambassador that the inquiry is actively proceeding at Boulogne, under the direction of the Commissaire Centrale, and that a special Commissaire has been despatched by the Minister of the Interior. Of course I do not know the particulars of the investigation; nobody but the magistrate actually concerned can know them. No doubt it is in the knowledge of the noble earl that investigations in France are conducted, not in public, as with us, but, on the contrary, quite privately, and therefore it would be out of the power of anyone to say whether the investigation was actually proceeding or not. We have expressed to the French Government our great anxiety that every measure should be taken to discover the murderer, if murder there was, and I have not the smallest ground for believing that there will be the slightest lukewarmness on the part of the French Government in carrying out the investigation.

The Pharmacy Acts.

On Thursday, the Earl of Milltown brought in a Bill to amend the Pharmacy Acts, and it was read a first time.

The Dublin Barracks.

In the House of Commons on the 10th inst., in answer to Mr. Norris, Mr. Stanhope stated that thirty-nine deaths occurred in all the Dublin barracks during the year 1887 among the warrant officers, non-commissioned officers, and men of the garrison. No officer died during that period. It was impossible to say how many of these deaths were attributable to causes intrinsic to the barracks. Four were due to enteric disease and eight to pneumonia. In consequence of the prevalence of enteric fever in the Royal Barracks, he called upon Sir Charles Cameron, chief medical officer of health of Dublin, and Dr. Grimshaw, registrar-general of Ireland—both quite unconnected with the army—to make a minute inspection of the barracks and to report on the causes of the continued unhealthiness and on the possible remedies. Previously to their report, and since April 18th, numerous small sanitary services were carried out in the barracks. But their report was received towards the end of last year, and contained no less than fourteen recommendations, which it was difficult to describe in detail. Under many of the heads the requisite measures had been taken, or were in hand. But there are two of grave importance, as to which no final action has yet been taken. One is the erection of a new hospital for the isolation of infectious cases. Endeavours are being made to set aside another hospital for this purpose. The other is the demolition of a large portion of the barracks, on the ground that some of the old buildings are too much crowded together. Unfortunately, it is very difficult to provide other accommodation in Dublin at this time of the year for the troops, who would thereby be turned out of the Royal Barracks, and the new barracks now being commenced cannot be ready for some time. Arrangements are being carried out which will enable the most unhealthy part of the Royal Barracks to be vacated as soon as possible. As regards Dover, he caused an inspection to be made by an inspector of the Local Government Board. A considerable expenditure has been incurred in carrying out his recommendations, and the sanitary condition of these barracks is believed to be satisfactory.

Insanitary Dwellings.

On the 13th inst., Mr. Thorburn asked the President of the Local Government Board whether, in view of the great amount of sickness and mortality resulting from insanitary dwellings, Her Majesty's Government would introduce a measure making it compulsory for owners of property to have a periodical inspection into the sanitary condition of inhabited houses.—Mr. Ritchie said that, in view of the work which the Government had in hand, they could not undertake to deal with the question this session.

Safety of Theatres.

On Thursday, the Home Secretary stated that the Government had under consideration the expediency of introducing a Bill this session on the subject of the safety of theatres.

Rabies.

Mr. Ritchie said, in answer to Viscount Curzon, that the question whether further steps were necessary to be taken in order to protect the public from the attacks of rabid dogs was under the consideration of the Government.

Army Medical Department.

Sir Walter Barttelot asked the Secretary of State for War (Mr. Stanhope) whether any alteration was contemplated in the medical service of the Household Troops, and, if so, what was its nature.—Mr. Stanhope said the whole question of the organisation of the Medical Department of the Army was engaging his earnest attention. Several of the details were still under consideration, and he must ask the hon. member to wait until the presentation of the Army Estimates, when he hoped to be able to explain fully the arrangements he was about to make.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BARRETT, C. W. SESSIONS, M.B., C.M.Aber., has been appointed Honorary Surgeon to the Hunts County Hospital, Huntingdon.

BOTT, HENRY, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for Brentford, vice Williams, deceased.

BOWIE, ALEXANDER, M.D., M.Ch.St.And., has been appointed Assistant Physician to St. John's Hospital for Diseases of the Skin, Leicester-square, W.C.

CHAPMAN, H. C., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Superintendent of the Mill-road Infirmary of the West Derby Union.

DOCKRELL, MORGAN, M.D., M.A., B.Ch.Dub., has been appointed Assistant Physician to St. John's Hospital for Diseases of the Skin, Leicester-square, W.C.

EASTON, GEORGE F., M.D.Ed., L.R.C.S., has been reappointed Medical Officer of Health for the Alnwick Rural Sanitary Authority.

FERGUSSON, WILLIAM BALFOUR, M.D., C.M.Aber., has been reappointed Surgeon to the Montgomeryshire Infirmary.

GIBBS, A. N. GODBY, L.R.C.P.Lond., M.R.C.S., L.S.A., has been appointed Honorary Assistant Surgeon to the Bristol Eye Hospital.

GOWAN, CHARLES, M.D., C.M.Ed., has been reappointed Surgeon to the Montgomeryshire Infirmary.

HAILES, CLEMENTS D. G., C.M., M.D.Ed., has been appointed Honorary Assistant Surgeon to the Bristol Eye Hospital.

HITCHINS, J. J., L.R.C.P., M.R.C.S., has been appointed Assistant Physician to St. John's Hospital for Diseases of the Skin, Leicester-square, W.C.

JOHNSON, MICHAEL, L.D.S.R.C.S., has been appointed Honorary Dental Surgeon to the Chester General Infirmary.

MITCHELL, RICHARD B., M.D. Ed., has been appointed Medical Superintendent of the Midlothian and Peebles District Asylum, Rosewell.

PALMER, HAROLD L., M.R.C.S., L.S.A., has been reappointed Surgeon to the Montgomeryshire Infirmary.

PITHIE, ALEXANDER D., L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the First District of the Lymington Union.

PRIESTLEY, R. C., M.A., M.B.Camb., M.R.C.S., has been appointed Registrar and Pathologist to the Hospital for Sick Children, Great Ormond-street.

SYMINGTON, JOHNSON, M.D., F.R.S.E., has been appointed Examiner in Anatomy to the University of Edinburgh, vice Professor D. J. Cunningham, M.D., F.R.S.E., whose term of office has expired.

TREVELYAN, E. F., M.D.Lond., B.Sc., M.R.C.S., has been appointed House-Physician to the Seamen's Hospital, Greenwich, vice E. H. Booth, M.D.Lond., M.R.C.S., L.R.C.P., resigned.

TURTON, W. H., M.B., C.M.Ed., has been appointed Medical Officer of Health for Heanor.

WELLS, ALBERT P., M.A.Cantab., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Fifth District of the Bromley Union.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Board, residence, and washing, but no salary.

BROMPTON CANCER HOSPITAL, S.W.—Pathologist. An honorarium of £80 will be voted at the end of the year.

CENTRAL LONDON ORTHOPÆDIC HOSPITAL, Gray's-inn-road, W.C.—Assistant Surgeon.

CIRENCESTER UNION.—Medical Officer for the Union Workhouse and the South District. Salary for the joint appointment £115 per annum, exclusive of vaccination fees and such extra medical fees as are allowed by the Local Government Board.

EARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Medical Superintendent.—Salary £500, with furnished apartments in the building, together with coals and gas.

FRENCH HOSPITAL AND DISPENSARY, Leicester-square, W.C.—Resident Medical Officer. Salary £60 per annum, with board, furnished rooms, and attendance.

LINCOLNSHIRE COUNTY ASYLUM, Bracebridge, near Lincoln.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary £70 per annum, with residence and maintenance in the house.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Resident Medical Officer. Salary £60 per annum, with board, apartments, and washing.

METROPOLITAN HOSPITAL, Kingsland-road, E.—Ophthalmic Surgeon.—Junior House-Surgeon. Salary £40 per annum, with board and residence.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Physician.

UNIVERSITY OF GLASGOW.—Examiners in Anatomy, Midwifery, Medical Jurisprudence and Medicine, and Clinical Medicine.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Salary £80 per annum, with board, residence, and washing.

YORK COUNTY HOSPITAL.—Senior House-Surgeon. Salary £100 a year, with board, &c.

YORK DISPENSARY.—Three Resident Medical Officers. Salary £130 a year, with furnished apartments, coals, and gas.

Births, Marriages, and Deaths.

BIRTHS.

BROGDEN.—On the 5th inst., at Lower Brook-street, Ipswich, the wife of R. W. Brogden, M.B., B.S., of a daughter.

BRUNTON.—On the 12th inst., at 10, Stratford-place, W., the wife of T. Lauder Brunton, M.D., F.R.S., of a daughter.

DUNLOP.—On the 11th inst., at Belgrave House, Jersey, the wife of Andrew Dunlop, M.D., of a daughter.

GOSS.—On the 7th inst., at the Royal Circus, Bath, the wife of T. Biddulph Goss, M.R.C.S., L.S.A., of a daughter.

HUXLEY.—On the 8th inst., at Higher-terrace, Torquay, the wife of J. U. Huxley, M.D., of a daughter.

LLOYD-ROBERTS.—On the 13th inst., the wife of J. Lloyd-Roberts, M.B., of Denbigh, N. Wales, of a daughter.

LOWNDS.—On the 10th inst., at Kirk Burton, Yorks, the wife of Henry A. Lownds, L.R.C.P., of a son.

PARSLOE.—On the 10th inst., at The Larches, Black Torrington, Devon, the wife of H. Heath Parsloe, M.R.C.S., L.R.C.S., of a son.

PEDLEY.—On the 10th inst., at Rangoon, Burmah, the wife of T. F. Pedley, M.D., M.R.C.S., Health Officer, of a son.

RUTHERFORD.—On the 13th inst., at Digby's, Exeter, the wife of R. L. Rutherford, M.D., of a son.

WEST.—On the 8th inst., at Wimpole-street, W., the wife of Samuel West, M.D., of a son

MARRIAGES.

DENT—PARK.—On the 8th inst., at St. Mary's Church, Ulverston, Harry L. R. Dent, M.B.Lond., to Daisy, fourth daughter of the late Rev. John Park, Incumbent of Rampside, Lancashire.

GRAVELY—LAINTON.—On the 9th inst., at the Old Parish Church, Hove, by the Rev. Jas. Browell, M.A., assisted by the Rev. T. Peacey, M.A., and the Rev. C. F. Clark, M.A., William Homewood, eldest son of Thomas Gravely, of Cowfold, to Emily Margaret, second daughter of Thos. Lainton, of Hove.

ODLING—BARKER.—On the 9th inst., at St. Mary Bredin's Church, Canterbury, Alfred E. Odling, M.R.C.S., L.S.A., to Bertha, widow of the late Captain Barker, 10th Hussars.

ROBERTS—PRICE.—On the 7th inst., at the Parish Church, Holywell, by the Rev. R. O. Williams, M.A., Vicar, assisted by the Rev. Llewelyn Jones, M.A., Curate, Richard Pritchard Roberts, M.R.C.S.Eng., L.S.A.Lond., of Bethesda, to Maggie, eldest daughter of the late John Price, of Holywell.

THOMAS—THOMAS.—On the 7th inst., at Hastings, J. H. Thomas, M.R.C.S., L.S.A., Surgeon, H.M.S. *Indus*, Devonport, to Angelene, youngest daughter of Dr. David Thomas, of Brewyn, Upper Tulse-hill, Streatham.

YOUNG—RANSOME.—On the 14th inst., at St. Mary's, The Boltons, by the Rev. H. Footman, assisted by the Rev. P. D. Eyre, W. H. Frome Young, of Wimbledon, to Hester, eldest daughter of Allen Ransome, Esq., of The Boltons, S.W.

DEATHS.

BISSILL.—On the 10th inst., at Southampton (of pneumonia), Arthur Kent Bissill, M.R.C.S., L.S.A.

GREEN.—On the 31st ult., at Dieppe, suddenly, John Green, M.B., C.M.Ed., of Bromfield-road, Maida-vale, and late of Preston.

HARRISON.—On the 9th inst., at The Grange, York-road, Birkdale, Southport, Josephine C., the dearly loved wife of G. Cooper Harrison, L.R.C.P., L.R.C.S.Ed., and daughter of the late T. T. Godfrey, M.R.C.S., of Liverpool.

HEPWORTH.—On the 9th inst., at Gloucester (of pneumonia), Geo. A. H. Hepworth, M.R.C.S., L.S.A., aged 63.

HOUGHTON.—On the 12th inst., at Bushey-park Cottage, Teddington, Walter Benoni Houghton, M.D., late of St. Leonards-on-Sea, aged 36.

JARVIS.—On the 13th inst., at Southwick, Sussex, N. Howard Jarvis, M.R.C.S.

LEACOCK.—On Dec. 22nd, 1887, at Camden, New South Wales, after a week's illness, Charles George Leacock, M.R.C.S., L.R.C.P., aged 46.

PERRY.—On the 11th inst., at Hackford-next-Reepham, Norfolk, Charles Henry Perry, M.R.C.S., L.S.A., aged 73.

POOL.—On the 11th inst., suddenly, at Tottenham, Wm. Brooks Pool, L.R.C.P.Ed., M.R.C.S.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, February 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. Watson Cheyne: Suppuration and Septic Diseases.
SOCIETY OF ARTS.—8 P.M. Mr. A. Gordon Salamon: Yeast, its Morphology and Culture (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Hutchinson: The Abortive Treatment of Syphilis.

Tuesday, February 21.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. G. J. Romanes: Before and after Darwin.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Inspector-General Lawson: Epidemic Influences. (Milroy Lecture.)
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Sutton and Mr. Shattock: Report on a case of Parasitic Fœtus.—Mr. D'Arcy Power: Congenital Fatty Tumour connected with Bone.—Mr. T. F. Chavasse: Parotid Tumour.—Dr. Crooke: Pulmonary Endarteritis.—Mr. Stonham: Complex or Vertical Hermaphroditism.—Mr. Doran: Papilloma of Fallopian Tubes.—Sir W. MacCormac: Epithelioma of Kidney associated with Calculus.—Mr. Pitts: Villous Carcinoma of Breast.—Dr. Wooldridge: New Constituent of the Blood. Card Specimens:—Mr. Stonham: Tumours of Bone.—Mr. Chavasse: Peculiar Vesical Calculus.—Mr. Bruce Clarke: Stone in Retro-prostatic Pouch.—Mr. Walsham: Volvulus of Cæcum and Lower Portion of Ileum.—Mr. Shattock: Dermoid Cyst from the Third Branchial Cleft.—Dr. Lediard: Enchondroma of Fingers.

Wednesday, February 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. Watson Cheyne: Suppuration and Septic Diseases.
HUNTERIAN SOCIETY.—8 P.M. Address by the President (Mr. R. Clement Lucas).—Dr. F. J. Smith: The Influence of the Discovery of Micro-organisms on Treatment.
SOCIETY OF ARTS.—8 P.M. Mr. Swire Smith: The Technical Education Bill.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. The adjourned Discussion on "Ectopic Gestation" will be opened by Dr. Barnes. Specimens illustrating Ruptured Tubal and other forms of Ectopic Gestation will be exhibited by Mr. Lawson Tait. Council, 8 P.M.

Thursday, February 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. C. Hubert H. Parry: Early Secular Choral Music (with Illustrations).
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Inspector-General Lawson: Epidemic Influences. (Milroy Lecture.)

Friday, February 24.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. Watson Cheyne: Suppuration and Septic Diseases.
MEDICO-PSYCHOLOGICAL ASSOCIATION.—5.30 P.M. Special General Meeting to consider the recent appointment at Hayward's Heath Asylum.
SOCIETY OF ARTS.—8 P.M. Sir William W. Hunter: Facts regarding the Religions of India, and their Influences on the Social Progress of the People.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Annual General Meeting. President's Address.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Holmes: (1) Case of Laceration of Axillary Artery in Attempted Dislocation of Shoulder, Death from Exhaustion, with Symptoms of Septicæmia; (2) Sequel to a case reported in Vols. IX. and X., under the title of "Ligature of the Left Carotid.—Mr. J. R. Lunn: Case in which the Superficial Femoral Artery was Ligatured for a Popliteal Aneurysm without Rupture of the Vessel.—Mr. B. Pitts: Case of Amputation of the Hip-joint for Osteo-Sarcoma of Femur, Secondary Hæmorrhage, Ligature of Common Femoral, recovery. Living Specimens:—Dr. Barlow and Mr. Ruffer: Case of Cured Subclavian Aneurysm.—Mr. Silcock: Case of Traumatic Meningocele.—Mr. Treves: A Patient upon whom Loretta's Operation on the Stomach was performed two months ago.
ROYAL INSTITUTION.—9 P.M. The Very Rev. G. Granville Bradley: Westminster Abbey.

Saturday, February 25.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Lord Rayleigh: Experimental Optics.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, February 16th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 10	29·89	W.	44	42	55	49	41	...	Raining
,, 11	29·66	S.W.	38	36	55	44	35	·09	Cloudy
,, 12	29·51	W.	37	35	46	39	33	·10	Cloudy
,, 13	29·54	W.	36	33	55	42	31	...	Hazy
,, 14	29·56	S.W.	38	35	62	41	34	·29	Overcast
,, 15	29·87	N.E.	37	35	55	39	34	·07	Overcast
,, 16	30·12	N.E.	35	34	...	38	33	·09	Snowing

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editors."
Lectures, original articles, and reports should be written on one side only of the paper.
Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe or recommend practitioners.
Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*
We cannot undertake to return MSS. not used.

THE RECOGNITION OF AMERICAN QUALIFICATIONS.

G. N.—Nothing has yet been decided by the Medical Council as to the recognition of foreign or colonial degrees. The action of the Medical Council hitherto in respect of foreign degrees has been under Clause 16, and has reference only to the case of medical men already registered in virtue of British qualifications. As regards the registration of foreign and colonial degrees *per se*, the Medical Council must wait for the action of the Privy Council. Our correspondent's criticisms are, therefore, to say the least, premature.

Unqualified Practice.—1. Only by courtesy, not legally.—2. It is not contemplated or allowed that a medical officer of health and a parochial officer shall do the work attaching to such offices by an unqualified assistant. The authorities would not sanction such an arrangement. The number of uncertified deaths is discreditable, and inquests ought to be held in all such cases. But of course the power to give certificates is not the only prerogative of qualified medical men.

Juvenis.—We cannot applaud the behaviour of the opposition in either the first case or the second. It is too much to expect that when public appointments are advertised openly, other practitioners shall not apply for them, but under the circumstances of the case stated to us there seems no justification.

Mr. H. G. Somerville.—The instrument appears to be of value, but a notice of it hardly comes within our province.

REYNOLDS' EXPERIMENTAL CHEMISTRY.

To the Editors of THE LANCET.

SIRS,—The reviewer of the fourth volume of my "Experimental Chemistry" inquires in your last issue whether I expect each student to perform the whole 815 experiments described and reasoned upon. My reply is, certainly *not*. The number of experiments to be performed by each student, and their nature, must depend on the time he can devote to chemistry, and, to a certain extent, on the purpose for which he learns the science. My work provides an extended series of experiments from which several moderate selections can be easily made, and not only include those which teach general principles, but make known facts of technical interest to different classes of students, whether medical, pharmaceutical, engineering, or arts. That teachers fully understand the right use of the work is best shown by its success, for I am informed that about 15,000 volumes (exclusive of the German edition) have been issued, and a *fifth* edition of one of the earlier volumes is now required.—I am, Sirs, truly yours,

J. EMERSON REYNOLDS.

University of Dublin, Trinity College, Feb. 13th, 1888.

MEMORIAL PORTRAITS OF DR. WILSON FOX.

Fourth List of Subscriptions.

The Marchioness of Exeter	£1	1	0	Geo. Russell, Esq., London	£3	0	0
Sir W. Roberts, Manchester	5	5	0	F. W. Salzmann, Esq., Brighton	5	5	0
Dr. Allchin, London	1	1	0	W. Bezley Thorne, Esq., London	1	1	0
C. Bradley, Esq., Nottingham	1	1	0	Dr. Travers, London	1	1	0
B. Cheyne, Esq., London	1	1	0	J. J. Tweed, Esq., London	2	2	0
W. R. Cheyne, Esq.	1	1	0	Edgcombe Venning, Esq., London	2	2	0
J. Dunlop, Esq.	2	2	0	Dr. T. Wakefield, London	1	1	0
Dr. J. Easton, London	1	1	0	T. G. A. Wake-Walker, Esq., Watford	5	0	0
*W. F. Fox, Esq., Nottingham	23	2	0	Mrs. Wake-Walker, Watford	5	0	0
A. P. Gould, London	2	2	0	Dr. H. G. Walker, London	1	1	0
Prof. Greenfield, M.D., Edinburgh	3	3	0	Dr. W. Wilson, Florence	1	1	0
Dr. W. B. Houghton, St. Leonards	2	2	0	From Australia, per G. B. Twynam, Esq.:—			
G. A. Ibbetson, Esq., Norwood	1	1	0	E. G. Blaxland, Esq.	1	1	0
Dr. Talfourd Jones, Eastbourne	1	1	0	J. Bonnefin, Esq.	1	1	0
T. T. Merriman, Esq., London	1	1	0	W. Chisholm, Esq.	1	1	0
G. Mackenzie, Esq., London	1	1	0	T. N. Creed, Esq.	1	1	0
Miss Anna S. Metcalfe, Hendon	5	5	0	D. Collingwood, Esq.	1	1	0
Miss Fanny Metcalfe, Hendon	5	5	0	C. M. Harper Crewe, Esq.	1	1	0
Sidney Parsons, Esq., London	1	1	0	R. L. Faithful, Esq.	1	1	0
‡Dr. Priestley, London	2	2	0	Sidney Jones, Esq.	1	1	0
Dr. W. Price, Cardiff	2	2	0	G. Maunder Jones, Esq.	1	1	0
				‡J. E. Jefferies, Esq.	1	1	0
				R. E. Roth, Esq.	1	1	0
				A. Shewen, Esq.	1	1	0
				R. T. Thring, Esq.	1	1	0
				M. W. Traill, Esq.	1	1	0
				G. B. Twynam, Esq.	1	1	0

* For the Replicas. † For the Coll. Phys. Replicas.
‡ For the Univ. Coll. Replica.

February, 1888. T. BARLOW, M.D., W. R. GOWERS, M.D. } Hon. Secs.

Venator.—A medical man is the best judge of the value of his services in such exceptional cases. No tariff can define the value of them, but they should be well rewarded. The first case especially is of this kind. In the second case, a five guinea fee would be a moderate charge, and a guinea for each subsequent visit.

Dr. Dudgeon.—We mean that in homœopathic practice both patients and practitioners refer and defer very much to Dr. Kidd, who has had to supplement the principle of *similia similibus* by the opposite one.

Mr. R. J. Cæsar is thanked for the newspaper cuttings. The subject shall have attention.

EPSOM COLLEGE.

To the Editors of THE LANCET.

SIRS,—I quite endorse the views of your correspondent "A Medical Practitioner," and suggest that another college shall be at once started for the education of sons of medical men at a reasonable figure—say, from thirty-five to forty guineas a year, to include everything except music. There would be no difficulty in getting some of the best certificated masters, and if the undertaking was managed well it would be a great success. The cost of education at present is absurd, if we only consider the price of food, which is just half or nearly so what it was ten years ago, and everything in proportion. I only hope some energetic father will take the matter in hand and call a meeting and start the thing; with a secretary to send some postcards to various medical men asking for their co-operation and support, then, doubtless, a good school or college could be got up. There is no reason why it should be at Epsom. Bath or Cheltenham would do better and be more central. It is time medical men should look after their interests a little.

I am, Sirs, yours faithfully,

Feb. 14th, 1888. A SUBSCRIBER.

To the Editors of THE LANCET.

SIRS,—I quite agree with "A Medical Practitioner" with reference to Epsom College. As to my own case, I may say that the fees for education being more than I could afford, I thought of sending one of my sons to compete for an exhibition, but found before doing so that it was necessary to submit a statement of my income, with other inquisitorial details, to a committee of the College, when, if my circumstances were considered sufficiently needy, my son would be allowed to compete for a vacancy in which the candidates were stated to be in the position of about three to one. As I found I could educate him at schools as good as Epsom College on professional terms amounting to about the same sum I would have to pay if he obtained an exhibition, I naturally declined to apply for the necessary permit.

I am, Sirs, yours faithfully,

February, 1888. M.B.

Mr. C. G. Jones.—It is not easy to reply without knowing the precise circumstances, but as a rule the person requesting the attendance, or on whose behalf the request is made, is primarily responsible.

Mr. R. Hughes.—All experience seems to point to the plane tree as the most suitable for the purpose.

Mr. Alfred Leach.—Our remarks were of a general character, and were not intended to apply to any particular institution.

Mr. F. B. Jessett.—Yes, shortly.

NYCTALOPIA.

A CORRESPONDENT directs our attention to some remarks published by the *Cologne Gazette* on the confusion, in some night manœuvres in Russia, resulting from a large number of the troops being affected with *Hühnerblindheit*, or night-blindness. The affection is well known to result from imperfect nutrition. The following account, given by Dr. Meissner, sufficiently demonstrates the nature of the affection:—In a small town of Podolia more than 100 cases of the complaint occurred. It was the time of the Greek fast, when the inhabitants eat no animal food, but live chiefly on bread and groats prepared with oil. When Easter came they ate the liver of a blackcock or black swine, and were cured in a few days. Meissner examined, both by day and night, many of those affected, but perceived nothing particular in their eyes, except great immobility of the pupils. They maintained they were in perfect health, and would recover their vision in a fortnight. Two of those he examined began to eat liver and animal food, and saw as well as ever on the third day. By the following Sunday all those affected were completely cured. The affection occurs sometimes in nursing women, who are ill-fed, amongst the poor.

Mr. W. J. Grover.—While we deeply sympathise with our correspondent, we are bound to say we do not think he has quite made out his case. His son (late midshipman R.N.) appears to have been exposed to considerable risk and hardship off Zanzibar, but not more than is frequently undergone by youngsters in the navy. It is by no means certain that his attack of rheumatic fever was due to this service; it seems not unlikely that it was contracted subsequently at Mauritius. The medical officers of the navy who were called upon to report on his case could not certify that his illness was the result of his boat service, and the Admiralty in consequence refused him a pension. We do not think Mr. Grover's remarks on the report of the medical officers are warranted. These gentlemen are entitled, in our opinion, to the credit of having stated their opinion honestly, and we have no doubt they did so reluctantly. Where we think Mr. Grover has good ground of complaint is that his son, having been employed as a sub-lieutenant on arduous service, and his health having subsequently broken down, has been treated as a midshipman and refused any compensation. The Admiralty in such circumstances might surely with justice have given him the benefit of the rank in which he was serving, though he had not been actually promoted to it; or, if they did not deem it right to do so, they might have found other employment for him in some of the numerous establishments under their control.

Mr. J. Shaw Bolton.—Bain's Mental and Moral Science, Sully's Outlines of Psychology, Fowler's Inductive Logic, Jevons' Elementary Lessons in Logic, Mill's Logic, Butler's Sermons (1, 2, 3), and Dissertation on Virtue, Mill's Utilitarianism, and Sidgwick's Outlines of History of Ethics.

H. G. S. had better lay a statement of the facts before the Commissioners in Lunacy.

AN ENORMOUS GOITRE.

To the Editors of THE LANCET.

SIRS,—I send you the measurements of an enormous goitre that came under my notice about eighteen months ago:—From the lower edge of the jaw to the bottom of the goitre, 15 in.; circumference of the neck of the goitre, 15½ in.; round the thickest part of the goitre, 20½ in. The goitre inclines more to the right than the left, and the right lobe is more developed than the left. The patient, a lad of eighteen years, tells me the swelling commenced in childhood, and has been gradually growing. Beyond the enormous weight and a dragging sensation the lad suffers no inconvenience. I saw him lately, but had no opportunity of measuring the growth. Although I have met with many hundreds of cases, I have never seen so large a goitre.

I am, Sirs, yours faithfully,

North Lakhimpur, Upper Assam. ROBERT CRAN, M.D., M.C.

St. John.—Roberts' Lectures, published by Lewis; Cantlie's "Accidental Injuries" (Clowes); Shepherd's "First Aid."

Mr. E. W. Evans.—To both queries we think we must answer in the affirmative.

A QUERY.

To the Editors of THE LANCET.

SIRS,—Can you or any of your subscribers kindly inform me of any instances, or instance, in which the staff of a provincial and county hospital in a growing town of over 50,000 population has been reduced from eight to six. The last yearly report of the hospital I allude to shows an increase of five in-patients and 425 out-patients.

I am, Sirs, your obedient servant,

Feb. 15th, 1888. J. LEGGE CURRIE.

J. W. O.—The question is purely a legal one, to be determined by the exact facts. Our correspondent should consult a solicitor.

Odd Fellow.—If A's representation of B's conduct be just, we think it both wrong and unprofessional.

THE TITLE "DENTIST."

M.S.—There is nothing in the Dentists Act which prevents a doubly qualified and registered practitioner from using in the way described by our correspondent the titles Dentist, Dental Surgeon, Surgeon Dentist. The greater includes the less. A surgeon is, of course, entitled to practise dental surgery. It is rather a question of expediency than of law to use a title which seems to narrow the qualification.

F. M. (New York).—The late Joseph Henry Green, sometime President of the Royal College of Surgeons, was one of the most philosophically minded men of his generation. Interesting reference is made to him in the first volume of Mr. T. Adolphus Trollope's recently published Autobiography, entitled "What I Remember," which also contains many happy allusions to distinguished physicians and general practitioners of the last sixty years—Dr. John Elliotson among the number.

Dr. Relander (Helsingfors).—We cannot exchange.

INSTRUMENT FOR EXAMINING CERTAIN PARTS OF THE LARYNX.

To the Editors of THE LANCET.

SIRS,—In the *Therapeutisches Monatschrift* of December, 1887, Mr. Lawrie Lawrence will find described and figured by Dr. Albert Rosenberg of Berlin an instrument very similar to that described by himself in THE LANCET of Feb. 4th. In Rosenberg's instrument the mirror is triangular in shape, and the mechanism for moving it appears to differ from that employed by Mr. Lawrence; the rotatory movement of the mirror round a vertical axis is also more limited. The principle of the two instruments, however, is the same—viz., that of viewing the posterior wall of the larynx and the subglottic region by means of a small mirror, which can be made to assume a more or less horizontal position after introduction into the larynx.

I am, Sirs, yours faithfully,

Brighton, Feb. 11th, 1888. E. CRESSWELL BABER, M.B.

"ELECTRIC ILLUMINATION OF THE MALE BLADDER AND URETHRA."

To the Editors of THE LANCET.

SIRS,—Mr. Schall's long reply relates entirely to matters which we did not contest, but which were, indeed, implicitly agreed to by us—viz., that the modern apparatus is less complicated than the old. All we affirmed—and this we repeat—was that in 1880 we exhibited the incandescent electric light within the bladder, not in a model, but in the living patient, and that it was thus illuminated and its condition was rendered as visible as it is now by the present apparatus. This is the point for which we contend, and not its portability and convenience, about which there was no dispute. We are, Sirs, yours faithfully,

Oxford-street, W., Feb. 14th, 1888. JOHN WEISS & SON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Allchin, London; Mr. S. Snell, Sheffield; Dr. Dickinson, London; Dr. Mickle, London; Dr. Thorowgood, London; Dr. Latham, Cambridge; Mr. F. Treves, London; Dr. Andrews, London; Mr. F. C. Wood, Sheriff Sutton; Dr. Donkin, London; Dr. Carmichael, Edinburgh; Mr. J. Lambert, London; Inspector-General Lawson, London; Mr. Turner, London; Mr. J. L. Currie, Bungay; Mr. F. H. Kenny, London; Mr. L. Ash, Holsworthy; Dr. McMordie, Belfast; Mr. Laban, West Bromwich; Mr. G. A. Wright, Manchester; Messrs. Otis Clapp and Son, Boston, U.S.A.; Mr. L. Archer, London; Dr. H. Blake, Great Yarmouth; Dr. J. MacKenzie, London; Mr. H. G. Somerville, New Brighton; Dr. Dizewiecki, Warsaw; Dr. Newth; Messrs. Waltham Bros., Stockwell; Mr. W. Whitehead, Manchester; Messrs. Wrigley and Son, London; Mr. P. Thornton, Canterbury; Messrs. Eason and Son, Dublin; Dr. T. Oliver, Newcastle-on-Tyne; Miss Pudney, Earl's Colne; Dr. Sutton, Quetta; Dr. Gervis, London; Messrs. Ross and Co., Belfast; Mr. Hughes, Bala; Dr. Schott, Nauheim; Mr. Walsham, London; Mr. T. F. Pedley, Rangoon; Mr. C. Baber, Brighton; Mr. F. Sturges, Beckenham; Mr. R. N. Jones, Swansea; Surg.-Major Dobson, Exeter; Dr. Nicholas, Wandsworth; Mr. E. W. Evans; Dr. Lightfoot, Newcastle-on-Tyne; Mr. J. E. Reynolds, Dublin; Mr. J. H. Dickson, Glasgow; Dr. G. A. Carpenter, London; Mr. J. W. Orr; Dr. Brett, Watford; Mr. J. S. Bolton, London; Mr. A. Leach, London; Dr. W. Squire, London; Mr. J. H. Gough, Wolverhampton; Mr. Stenhouse, Glasgow; Mr. Grinling, Burton-on-Trent; Dr. Ridge; Dr. Bower, Bedford; Dr. Brooks; Dr. Lindsay, Belfast; Dr. Mayne, Longford; Dr. Loewenstark, Berlin; Mr. Redmond, Glasgow; Mons. Dargannec, Rouen; Mr. H. Harris, Dundee; Dr. Halket, Glasgow; Dr. Benthall, Southsea; Dr. Goldstein, Prague; Mr. Jessett, London; Mr. Gray, Liverpool; Mr. Whitham; Mr. Mahoney; Mr. Simpson; Mr. Bond, Leicester; Mr. Gurner, London; Mr. Hunt, Manchester; Mr. Maw, Bradford; Messrs. Wilkinson, Brighton; Mr. Porter; Messrs. Giles and Co., Clifton; Mr. McCornell; Dr. Gibbons, Surbiton; Mr. R. Davis; Mr. Morison, Duffield; Mr. Reed; Dr. Rutherford, Exeter; Dr. Corkhill, Matlock; Centuary; Venator; St. John; M.B.; Another M.D.; Perplexed; Accoucheur, London; M.A., Cambridge; H. G. S.; A Subscriber; A Struggling Practitioner.

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Keble's Margate and Ramsgate Gazette, Windsor and Eton Gazette, Windsor and Eton Express, Leicester Post, Hertfordshire Mercury, Belfast News Letter, Ramsgate and Margate Chronicle, Hull Daily Mail, Advocate of India, Lincolnshire Chronicle, Newcastle Daily Journal, Staffordshire Sentinel, Portsmouth Evening News, &c., have been received.

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